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Macworld

OS X CONFIDENTIAL

TIGER SECRETS REVEALED!

55 Hidden Features, Bug Fixes, and Smart Time-Savers

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VIRTUAL CD

Online Extras!
Tiger Tips, 10 Cool New Widgets, and More, p. 4

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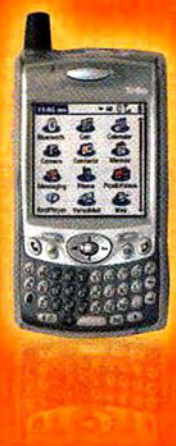
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OPINION

7 **From the Editor's Desk**
JASON SNELL
So may Podcasts, so little time—a self-described "media junkie" deals with media overload.

12 **Feedback**
Readers respond.

MAC BEAT

16 Intel's processor road map (and the chips you might see in future Macs), new iBooks and Mac minis, Best of Show awards from Macworld Conference & Expo in Boston, Macromedia Studio 8, and more.



16 MAC BEAT



18 SAVING THE DAY

REVIEWS

26 **Final Cut Studio**
- Final Cut Pro 5
- Soundtrack Pro
- DVD Studio Pro 4
- Motion 2

34 **More Reviews**



36 **Game Room**
PETER COHEN
Tee off with two Mac golf games: the ultrarealistic Tiger Woods PGA Tour 2005 and the casual miniature-golf challenge Garden Golf. We also have reviews of Commandos Battle Pack, Diner Dash, and Darwinia.

44 **Mac Gems**
DAN FRAKES
Get more from your AirPort Express, move files and folders via contextual menus, check your spelling, keep track of how much time you spend using different apps, keep from accidentally closing multiple tabs in Safari, and make bootable hard-drive backups.

52 **Top Products**



22 NOT SO FAST, ADOBE



On the Cover
Photographs by Peter Belanger



The Virtual CD

Macworld doesn't end on the last page. All magazine readers also have access to a new virtual CD-ROM each month. To view this month's exclusive content, go to the following URL (broadband Internet recommended): http://cd.macworld.com/2005/10/fish-toss

COVER STORY

56 **Tiger Secrets Declassified**
With all the hidden features and undisclosed shortcuts tucked away in OS X 10.4, you might think that Apple worked for the CIA. To see what secrets Tiger is keeping, we sent in our own team of private eyes. Here are their 55 most revealing discoveries.

FEATURE

71 **Which Mac Is Right for You?**
ADAM C. ENGST
Power Mac, iMac, eMac, or Mac mini? PowerBook or iBook? Figuring out which desktop or portable Mac will best meet your needs isn't always easy. Let our interactive guide step you through the decision process.





SECRETS

76 WORKING MAC
Use Mail's Smarts
JOE KISSELL
Mail 2.0's Smart Mailbox feature lets you dynamically organize messages in as many ways as you'd like. We show you the secrets behind its power.

80 PLAYLIST
Fix iTunes and iPod Problems
JONATHAN SEFF
iTunes makes listening to your favorite songs easy, but it's not without its problems. From misbehaving songs to vanishing iPods, learn how to solve your musical dilemmas.

84 DIGITAL PHOTO
Silence Noisy Photos
JIM HEID
Do mysterious pink and green splotches mar your favorite portraits? Do your low-light shots look as though they had been taken during a snowstorm? These are signs of *noise* in images. Our step-by-step instructions will help you remove it.

86 CREATE
Avoid iMovie HD Annoyances
DAVID POGUE
Apple's consumer digital video software has big new features. It also has some sizable bugs. Before you tear out your hair, turn to our handy guide to solving iMovie HD's annoying quirks.

88 MOBILE MAC
Ad Hoc Networking
GLENN FLEISHMAN
Sometimes you need a network while you're on the road. We show you your best options for connecting to other Macs when you're far from home.

92 GEEK FACTOR
Whip Up a Widget
DORI SMITH
It's easy to download new widgets for Dashboard, but it's also not too difficult to create your own. Find out how to build a personalized widget that counts down to a special event.

94 HELP DESK
Mac 911
CHRISTOPHER BREEN
Avoid wireless interference, make your keyboard less sensitive, root out corrupt Mail messages, alphabetize your bookmarks, access QuickTime 7's video controls, add file names to photos, and more.

BACK PAGE

120 **Hot Stuff**
Check out our favorite new stuff.

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Media Feast

After a recent three-week journey (see my September 2005 column), I was extremely happy to return home. But I was taken aback by what I found waiting for me there—a *gigantic* stack of magazines, a TiVo bursting with shows, the new Bob Mould CD, and the new Harry Potter book. It was enough to overwhelm even a media junkie like me.

It was a feast for the senses, to be sure. But how would I find the time to consume it all? My life is already saturated with media options. I use my daily commute to read newspapers and magazines, as well as the occasional book. After the kids are in bed, my wife and I like to watch a spot of television. And now my Mac has added two more options: Podcasts and TV shows.

My Own Private Radio

Just after I left on my trip, Apple released iTunes 4.9. The marquee feature of this release is support for Podcasting. In case you've never heard of Podcasting, here's a 30-second overview: It's a system that lets people publish audio content on the Internet. When you subscribe to a particular Podcast, your Mac will download new audio files when they appear.

Steve Jobs calls Podcasting "TiVo for radio," and there's some truth to that. Just as TiVo's groundbreaking digital video recorder and its competitors have given people unprecedented control over their TV viewing, Podcasting lets you pick what kinds of audio programs you want to listen to. And since Podcasts are distributed over the Internet, anyone can create a Podcast.

Within a few days of returning home, I had subscribed to a clutch of Podcasts: *Baseball Prospectus Radio*, *Science Friday*, *Nightline*, and a fascinating deconstruction of the Bard called *Shakespeare-upon-iPod* (all available from the Podcasts section of the iTunes Music Store). They automatically synced to my iPod, and my fate was sealed.

I really don't like the radio, mostly because I hate not being able to skip over stuff I don't want to listen to. With Podcasts, you can not only pick the Podcasts you want to listen to, but also fast-forward through a Podcast or skip it entirely if it starts to bore you.

There are, not surprisingly, about a zillion Podcasts aimed at Mac users, including *Your Mac Life*, *Inside Mac Radio*, and *The Mac Night Owl*. And I would be remiss if I didn't point out that *Macworld* has its very own Podcast. Hosted by our assistant editor, Cyrus Farivar, the twice-monthly *Macworld Podcast* covers breaking news, as well as topics related to the current issue of the magazine. To subscribe, visit macworld.com/podcast.

Video in My Pocket

But Podcasts aren't the only thing I'm carrying around with me these days.

The latest piece of diabolical software that is threatening to ruin my life is The Core Pocket Media Player, or TCPMP (tcpmp.corecodec.org). TCPMP plays various video formats on Palm and Windows CE devices, including my Palm-powered Treo 650 cell phone. (By the way, if you own a Treo, you should check out the excellent Treonauts blog [treonauts.com].)

I've got to admit that, thanks to TCPMP, I can sometimes be found on a northbound evening bus watching reality TV shows on my phone. Is this a sign of the coming apocalypse? I'll let you decide.

What I've Learned

There are only so many hours in the day. By adding Podcasts and TV-on-Treo to my palette of media options, I don't actually create more time in my life to consume media. But these new technologies have given me more freedom of choice, and that's a good thing. I can consume whatever suits my mood. I've listened to that Bob Mould album dozens of times already, and *Harry Potter and the Half-Blood Prince* succumbed in a matter of days. But I've also listened to the lead scientist of NASA's Mars Rover missions interviewed on NPR, listened to *Baseball Prospectus*'s Will Carroll deconstruct baseball's steroid scandals, and, yes, watched the nefarious Team Guido attempt to cheat their way to the top of the first *Amazing Race*.

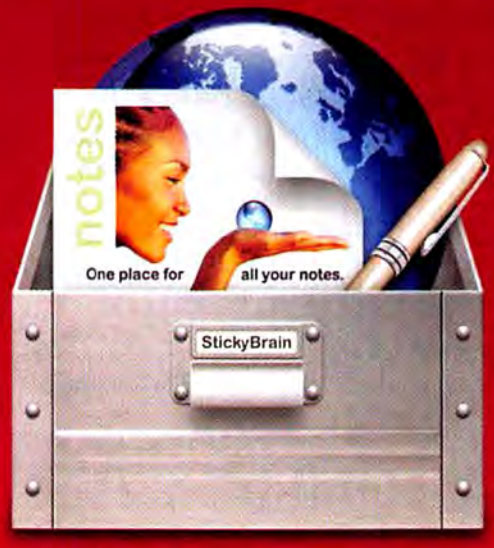
It has been a great media banquet—and, I admit, my tummy hurts a little bit. As these technologies creep into our daily lives, it's important to keep that old saying in mind: Moderation in all things. □

How have the Web, Podcasting, TiVo, and other technologies changed how you consume media? Drop me a line at jason_snell@macworld.com or visit our forums at macworld.com/forums.

PORTRAIT BY PETER BELANGER

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October 2005, Volume 22, Issue 10

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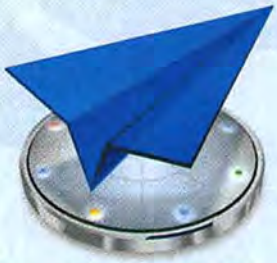
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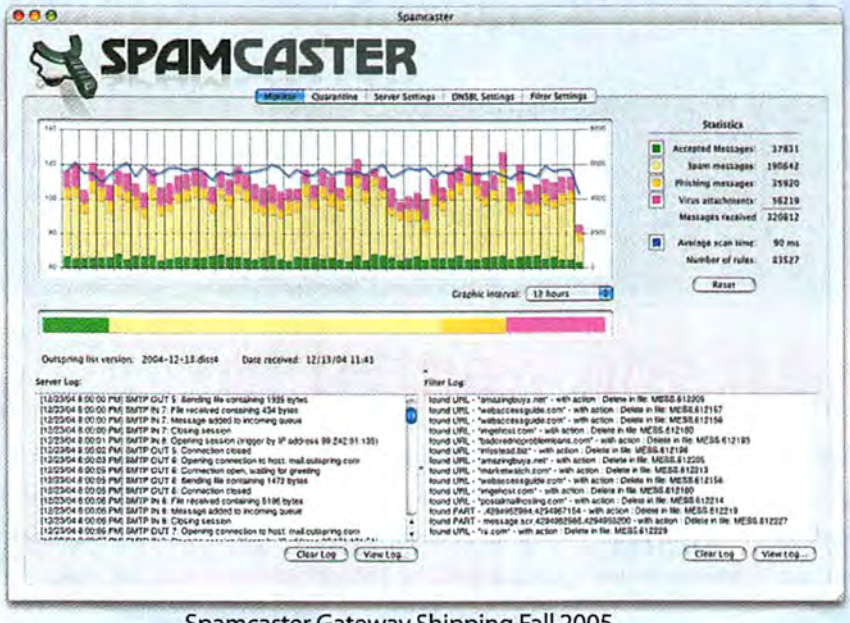
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FEEDBACK

Talking Tiger

As we were preparing this month's issue, we picked up an amazing little tidbit from our market-research folks. Just a couple of months after the introduction of Mac OS X 10.4—or Tiger—about half of *Macworld*'s readers are already using it. (Apple doesn't expect half of the general Mac-using population to have made the switch to Tiger until June 2006.) Judging by the volume of letters we've received about our July cover story, most of you who've made the switch have some strong opinions about the new OS. □

Early Adopters Speak

MARY STAMPER

My thoughts on Tiger? Dashboard: I like the idea of little programs that don't take too much space or time to open. But I wish Apple would just go ahead and give us true virtual desktops; I could reserve one for accessory programs, another for documents I'm working on, and so on. I also wish Dashboard apps weren't limited to HTML and JavaScript concoctions. Why can't I just put OS X's own Calculator in there instead? Safari RSS: Having to find and click on the RSS-feed bookmark to bring up a Web page is clumsy. I might as well go to the page in the first place. Spotlight: Why bother navigating through folders in the Finder, even if I know where the file I want is? Now I can let Spotlight do the work—and do it very well. I also use it as an application launcher. I've got a ton of apps on my system—there isn't enough room for all of them in the Dock, and I don't use most of them often enough to justify putting them there. Spotlight solves the problem perfectly.



PETER CAMPBELL

For my birthday this year, I bought myself a brand-new iMac running Mac OS X 10.3.5. Then Tiger came out, and I decided to upgrade. When I got my discs, I chose the Archive And Install option—and then the problems began.

Although my iMac was a plain-vanilla system, some programs worked after the upgrade and others wouldn't. I tried repairing permissions (as suggested in Apple's online forums), but the problems persisted. I was so frustrated that I did a completely clean reinstall of OS X 10.3.5 and all my programs, and put Tiger away. But after about three days, I decided I was not going to let Apple beat me. Since a clean install of 10.3.5 had worked, I figured I would do the same with Tiger. The clean install took much less time to perform than the Archive And Install one, and Tiger worked without any of the problems that I had experienced or others had described. Once again, my instinct about upgrades held true: Don't do it! (I will quickly add that now that Tiger is up and running, it is nothing short of beautiful—clean, simple, and responsive.)

CHRISTOPHER KINTZ RINDGE

Apple's decision to release Tiger only on DVD is a slap in the face to the many loyal Apple customers who have only CD drives. When I called Apple about getting Tiger on CD, the company told me that I could order the DVD and ship it back along with an additional $9.95 (for shipping and handling), and the company would exchange the DVD for a set of CDs. This is crazy! Why not just sell me the CDs in the first place? My family includes three generations of loyal Apple users. We love Apple products, but they shouldn't be this hard to buy.

LYNNE RUDIE

Your articles on Tiger were wonderfully informative, but they made me kind of grouchy. I'm a graphic designer. For those of us who make our living on our Macs, upgrades are disruptive. We have to add to the price of the software the cost of the time we lose getting everything running smoothly again and learning how all the new stuff works. Your little sidebar (in "Tiger Arrives," July 2005) about how to perform the upgrade doesn't tell even half of what's involved in getting a real, working Mac running productively after a major upgrade. Don't get me wrong, I love my Mac. But it's not a toy—Tiger is going to have to wait.

MARK ABRAHAM

I finally found a problem with Tiger: iCal no longer displays the correct date in the Dock after you quit the app. Bad move on Apple's part!

PETER RONAI

The Apple ad for Tiger on the inside front cover of the July *Macworld* shows a screenful of Dashboard widgets. At least two are embarrassingly inaccurate. The Dictionary widget says that *metatarsal* means "any of the bones of the foot (metatarsus)." In fact, the metatarsal bones are found in the middle of the foot and represent only 5 of the foot's 25 bones. Second, the Conversion widget shows that 60 miles per hour converts to 96.55789 kilometers per hour. The correct figure is actually 96.56064 kilometers per hour. I would have grave reservations about using Dashboard.

Classical Gas

JAMIE PHELPS

Your *Playlist* column about managing classical music in iTunes was quite good ("Cor-

PHOTOGRAPH BY PETER BELANGER

ral Your Classical Music," July 2005). One thing you neglected to mention was the Grouping tag. I use Grouping to label the overall piece ("The Lord of the Rings," for example) and Song Name for the titles of individual movements ("I. Gandalf," "II. Lothlorien," "III. Gollum," and so forth). Too bad neither iTunes nor the iPod allows me to shuffle by Grouping (only by Song Name or by Album).

GLENN PILLSBURY

Chiming in on Kirk McElhearn's column about dealing with classical music in iTunes: having recently converted our extensive classical collection (more than 2,700 tracks and 18GB of music, with dozens of era-based genres), I wanted to recommend Doug's AppleScripts for iTunes (www.dougscripts.com/itunes). As mentioned in the article, one of the biggest headaches with classical discs is poor data from CDDB (the online music database that supplies track information for iTunes): movement titles placed in the performer column, composers in the album column, misspellings, and so forth. Several scripts from Doug's site helped me correct that data across several tracks at once. In particular, I found the Put This After/Before That, Swap This With That, and Replace Text In Track Names scripts invaluable.

AirPort Assistance

MICHAEL AND SARAH RUSSO

We want to thank Andrew Laurence for his July 2005 *Mobile Mac* column ("Fix AirPort Printing Problems"). Our home network includes two Macs and a Windows XP box, along with an AirPort Extreme Base Station that has a Canon i960 connected to it; those components are all connected to a Linksys router, which in turn is fed by a cable modem. We'd been struggling to get the XP box to print. I had tried connecting to the printer via IP, as the Apple Knowledge Base suggests, but that never worked. Lo and behold, I read the "AirPort Does Windows" section of the article and tried the tip about using Bonjour for Windows, and my home network is now fully functional. *Merci* to Andrew and to Bonjour!

What the "L"?

ROB MARTINI

You folks have been a terrific help to me. Thank you! Because I've experienced difficulties with my battery, the July issue's "Unix Tip of the Month" (*Mac OS X Hints*) regarding battery life was most welcome. But I didn't get the results I expected. Nothing came up regarding "cycle count" or "absolute max capacity"—values that will help me figure out whether I need to replace my battery.

It seems that you were one of the many readers who mistakenly entered the numeral 1 *instead of a lowercase* L (l) *when you entered the command in Terminal. Try it again with the letter, and you should get the results you want.—Ed.*

Adobe Redux

JD WARRICK

David Sawyer McFarland's article on what will happen when Adobe consumes Macromedia was very interesting ("Adobe Swallows Macromedia," *Mac Beat*, July 2005).

continues



But if you really want know what will happen in the aftermath, I have just two words: Remember Aldus.

CameraWorld?

GARY WRIGHT

OK, what's the deal with digital cameras? My latest issue of *Macworld* (July 2005) has two articles devoted to cameras, taking up four pages. The April issue had reviews of photo viewers, photo printers, and a camera, and the January issue had two camera articles that consumed 13 pages. While I expect *Macworld* to cover software for photographers, I don't subscribe to it to read about cameras. There are plenty of photography magazines out there, but there are damn few Mac magazines. In addition to Mac computers, photography and canoeing are two of my hobbies. But that doesn't mean I want to see articles in *Macworld* about cameras and canoes. And don't even get me started on the percentage of pages that *Macworld* has devoted to the iPod.

As always, we invite readers to tell us what they'd like to see more of in Macworld.—*Ed.*

iProblems

JOSE DONIDA

I recently purchased an open-box iPod mini. When I loaded the software and hooked up my iPod with the USB cable, nothing happened. iTunes didn't open, the iPod just flashed its "Do not disconnect" message. The disk icon of the iPod did show up on my desktop, so I tried dragging the music out of iTunes and into the iPod—again, nothing. I returned that iPod and purchased a brand-new one. I loaded the software on my Mac and hooked up the new mini to the computer—again, nothing. After reading the user guide, I realized my problem: The iPod software required OS X 10.3.4, but I was running 10.3. I wanted this to work, so I decided to update to OS X 10.3.9. Unfortunately, it's a 117MB download, and I have dial-up service. After three hours, I'd downloaded only 50MB. That's when I started glancing at the PC in the playroom. Sure enough, I loaded the iPod software on it and was able to download the music to my iPod without a hitch. Why didn't Apple include the OS update on the CD that comes with the iPod?

CORRECTIONS

In the *Mac Beat* section of our September issue, we described the Cobb County, Georgia, school district's plans to lease 17,000 iBooks from Apple for its students ("iBooks for Everyone"). Shortly after that issue went to press, a Superior Court judge halted the deal, in response to a lawsuit filed by a former county commissioner.

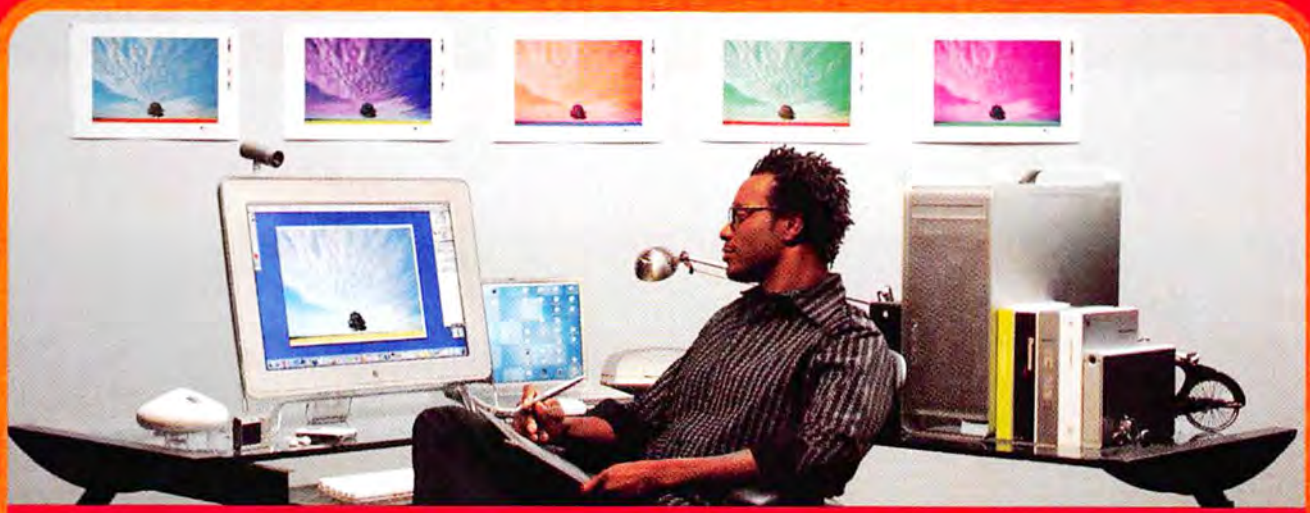
In our September issue's *Hot Stuff* section, we printed an incorrect URL. The OS X version of Across Lite is at macworld.com/0741.

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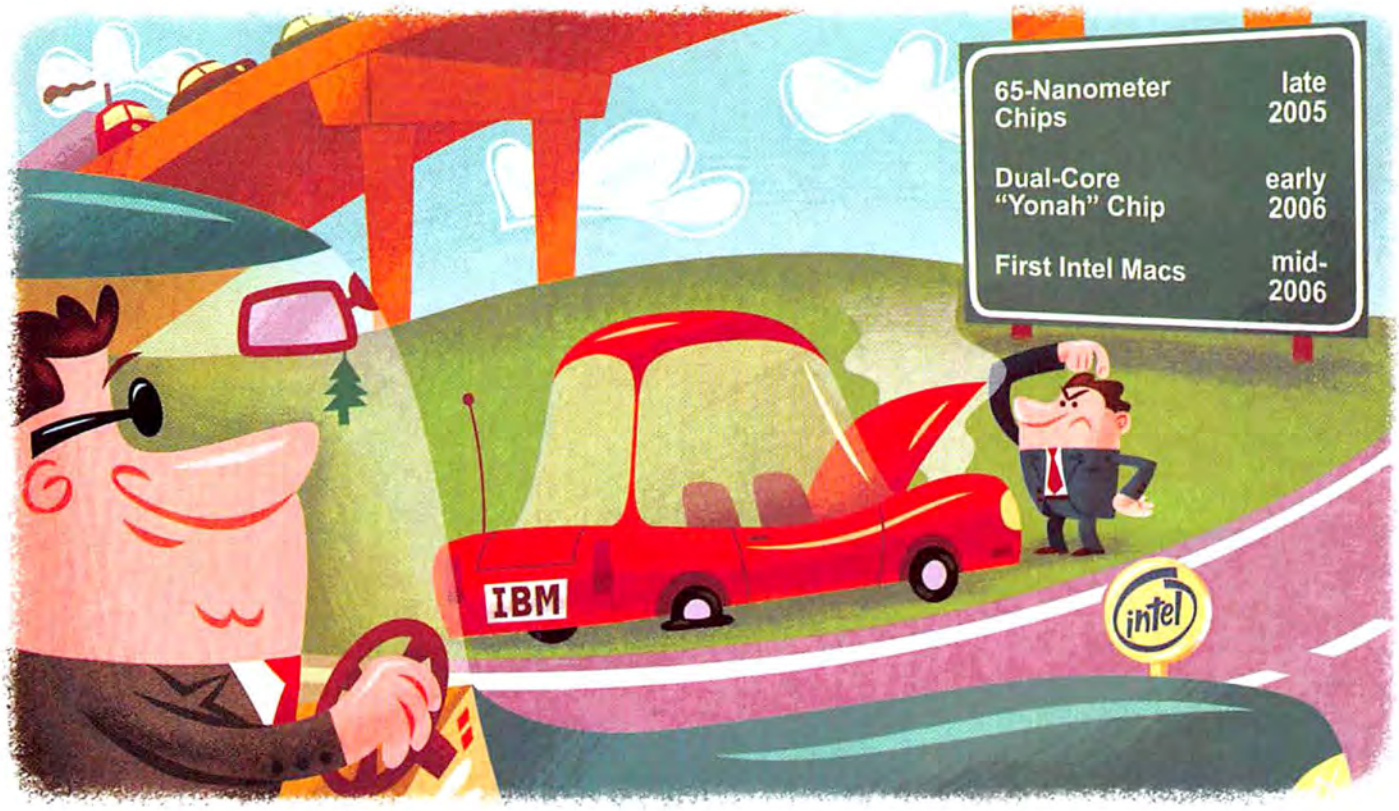
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Intel's Road Map

What Is Intel Working On, and What Will It Mean for Future Macs?

BY JON L. JACOBI

Contrary to some opinions, Apple didn't walk into its Intel deal with eyes wide shut. Whatever the reason for the processor switch—whether it's Intel's better performance per watt, as Steve Jobs has said, or one of the more complex explanations making the rounds on the Internet—Apple wouldn't have made the move if it weren't convinced that the Santa Clara, California, giant's CPUs were the way of the future.

Although no one outside of Apple and Intel was privy to the closed-door meetings, the plans that Intel displayed at its May 2005 developer forum must have gone a long way toward persuading Apple.

The Road Ahead

In the broad sense, Intel's future processor philosophy can be summed up as "More and Smaller." *More* means dual-core processors—having a dual-core processor can be likened to having both of a dual-processor Power Mac G5's PowerPC processors on a single piece of silicon. Intel estimates that 70 percent of its Pentium CPUs (desktop and mobile) will be dual-core by 2006.

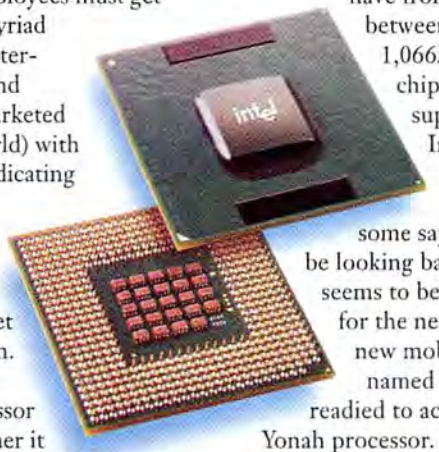
Smaller means that the company is moving to chips with traces that are 65 nanometers apart, rather than 90 nanometers apart (as they are now). Less space between traces means more chips per acre of silicon—and potentially lower

ILLUSTRATION BY ERIC STURDEVANT

chip prices, as well as faster speeds. Intel will start producing 65-nanometer chips by the end of 2005, while IBM is still stuck at 90-nanometer chips for the foreseeable future.

A Closer Look

But Intel has so many processor models that even Intel employees must get confused by the myriad versions named (internally) after cities and towns and then marketed (to the outside world) with model numbers indicating everything from architecture, speed, and cache size to the type of motherboard socket the processors fit in. And then there's whether the processor is dual-core, whether it supports the EM64T 64-bit instruction extensions, and whether it features Hyper-Threading.



Though Intel offers a huge variety of processors, its current state-of-the-art 64-bit desktop products are the dual-core Pentium Extreme Edition 840; the dual-core Pentium D 820, 830, and 840; the single-core Pentium 4 (in too many models to list); and the single-core Celeron D (also in too many models to list). All run between 2.5GHz and 3.8GHz, and all are 90-nanometer models. The dual-core Pentiums and one single-core Pentium 4–based processor (code-named Cedar Mill) should be at 65 nanometers sometime in early 2006.

Also early in 2006, the Pentium M, Intel's flagship mobile product, will be supplanted on the high end by a 65-nanometer dual-core chip code-named Yonah, which will offer speeds of up to 2.17GHz. (Apple's current PowerBook line, by contrast, has only one processor that tops out at 1.67GHz.) Since both the Pentium M and the Yonah are 32-bit chips, we probably won't see a 64-bit Intel-based Mac portable until after the next updates to Apple's laptop lines.

Intel is the chief designer and supplier of its own *chip sets*, the auxiliary chips that handle CPU communication, memory, and peripherals. The most-recent Pentium chip sets are the 915, 925, 945, and 955, which support PCI Express (a faster serial PCI connection already being used in graphics cards), have as much as 4GB of DDR2 RAM, and have frontside buses running between 500MHz and 1,066MHz. Several of the chip-set incarnations also support DDR RAM, but Intel made the switch to DDR2 earlier than the rest of the industry—some say too early—and won't be looking back. The 900 series seems to be Intel's chip-set choice for the near future; however, a new mobile chip set code-named Calistoga is being readied to accompany the new Yonah processor.

The Pentium M will be supplanted by a dual-core chip code-named Yonah.

Forecast: Legal Rain

The information Intel has parceled out about its CPUs and chip sets doesn't extend beyond 2006. However, the introduction of EM64T, dual-core chips, PCI Express, and DDR2 are very recent, and you shouldn't expect any startling announcements for at least a year or two—unless of course they involve Intel rival AMD.

AMD has filed suit against Intel, alleging that Intel indulges in illegal monopolistic practices that have prevented AMD from appreciably increasing its market share or selling to large vendors such as Dell. Which company wins the court case is largely irrelevant to Apple's future from a technological standpoint—AMD CPUs are completely x86 and Intel-compatible, so there's no real reason that Apple couldn't switch chip providers. However, a second competitive supplier might lead to less-expensive Macs down the road. □

JON L. JACOBI is a widely published freelance technology journalist who frequently contributes to *PC World* and CNet.

If I Had to Guess

In typical Apple style, the announcement that the company would be moving to Intel chips raised many more questions than it answered. So why is Apple making this giant leap, and what Intel processors will we see in these new Macs? I have a few ideas.

The Pentium M and Celeron M, and derivatives thereof, were what Apple was after with the switch to Intel—as well as, perhaps, a company that actually cared that Apple existed. Therefore, it's highly likely that a PowerBook based on one of these power-efficient notebook processors will be the first Mac-Intel product to market. Be prepared for substantially better battery life and performance.

We might even see a Pentium M or a Celeron M in a new version of the Mac mini. Because Intel's mobile processors use less energy, they generate a lot less heat than Intel's desktop CPUs—so Apple could achieve faster speeds without increased fan requirements. But Celeron Ds are likelier to be used in new versions of the mini.



High-end Intel-based Mac desktops will probably feature dual-core Pentium Extreme Edition or faster Pentium D processors. Single-core Pentium 4s, the new single-core Cedar Mill, or slower dual-core Pentium Ds will power products such as the iMac. Using single-core CPUs in inexpensive machines would allow for more-obvious distinctions between price points—but at the same time, the cachet of an all–dual-core lineup might be too much for Apple to resist.

Expect new Intel-based Mac desktops to offer PCI Express and DDR2 RAM—technologies that are pushed by the latest Intel chip sets in the PC world, and which are likely to form the heart of future Macs.—JON L. JACOBI

APPLE INTRODUCES THE MIGHTY MOUSE

Saving the Day



It has taken 21 years, but Mac users can finally cross one item off of their collective wish list—a multibutton mouse from Apple. The $49 Mighty Mouse (yes, that's really its name) is the same shape and size as Apple's standard mouse, but it offers four programmable buttons (including its Scroll Ball, which works in any direction).

The USB Mighty Mouse features one surface with two clickable sides; either side can be programmed as the primary (single-click) button—so it's ideal for right- or left-handed users. With a click on the other side of the mouse, users can access features such as contextual menus. The Scroll Ball lets you scroll up and down in a Web page, sideways through the timeline in iMovie, or diagonally across a large digital photo in Adobe Photoshop, for example. And squeezing the sides of the Mighty Mouse can trigger a programmable button behavior, such as accessing Spotlight, Dashboard, or Exposé, or launching any application.

There are many mice out there, so why is Apple's special? "If you look at the multibutton-mouse market today, they are all a little complex," says David Moody, Apple's vice president of worldwide Mac product marketing. "We didn't want to make it more difficult than a single-button mouse."

The Mighty Mouse works with OS X (10.4.2 or later for programmability and other advanced features), as well as Windows 2000 and XP. Next on our wish list: a Bluetooth version.—JIM DALRYMPLE AND JONATHAN SEFF

YAHOO ACQUIRES KONFABULATOR

A Second Chance



When Apple first showed off OS X 10.4's Dashboard feature, many people thought that Konfabulator—a cross-platform application that also allows users to run miniature applications, known as widgets, on the desktop—might go the way of the dinosaurs. But Yahoo has breathed new life into Konfabulator (www.konfabulator.com), announcing at the end of July that it would acquire the $20 program—and give it away for free.

Yahoo purchased Konfabulator in order to make it easier for developers to write applications that access information from Yahoo's Web sites. "What we can do with Konfabulator is wrap these services that we are opening up into an environment that is really easy for people to develop in," says Tony Schneider, vice president of the Yahoo Developer Network.

The acquisition of Konfabulator may not be the last Mac-compatible product users see from Yahoo, either. "There is a move at Yahoo—in addition to Konfabulator—to move more onto the Mac," says Schneider. "We want to make sure we find a way to be more cross-platform."

Arlo Rose, longtime Mac developer and CEO of Konfabulator's parent company Pixoria, will be staying on to head the development of Konfabulator at Yahoo—with the title Director of Widget Technology.

With the acquisition, Konfabulator's developer base could increase to many times what it was with Pixoria. "I think this is going to be a great opportunity for Mac users because it is opening up Konfabulator to a huge audience that we never had the ability to reach as a three-person company," says Rose. "It's not just being developed on a Mac for a Mac; it's being developed by everybody for the Mac."

Yahoo currently makes two widgets for Dashboard: My Yahoo and Yahoo Local Traffic. While the company will continue to develop those widgets for Dashboard in the short term, no decision has been made on the future development for those products—however, Rose and his team will make sure those widgets work with Konfabulator.—JIM DALRYMPLE

HARDWARE BEAT

319 LCD, from LaCie (www.lacie.com): This 19-inch monitor features a maximum resolution of 1,280 by 1,024, a contrast ratio of 600:1, and a 178-degree viewing angle ($999).

Aficio CL7200 and CL7300, from Ricoh (www.ricoh-usa.com): These color laser printers feature 1,200-by-1,200-dpi resolution; the CL7200 prints 28 color and 32 black-and-white pages per minute, while the CL7300 prints both black-and-white and color documents at 35 pages per minute (CL7200, $3,495; CL7300, $5,095).

Flip for Mac mini, from Belkin (www.belkin.com): Device lets you share a VGA monitor, a USB keyboard, and a mouse between a Mac mini and a second Mac or a PC ($100).

MachSpeed iMFP G4, from Daystar Technology (www.xlr8.com): CPU upgrade for flat-panel iMac G4s bumps processor speed to 1.35GHz, from 700MHz or 800MHz (contact Daystar for pricing).

Perfection 3590 Photo, from Epson (www.epson.com): Flatbed USB 2.0 scanner features 3,200-by-6,400-dpi resolution and a built-in automatic film loader for viewing and scanning 35mm film strips ($149).

Perfection 4490 Photo, from Epson (www.epson.com): Flatbed USB 2.0 scanner features 4,800-by-9,600-dpi resolution, one-touch restoration, and scratch- and dust-removal capabilities ($249).

Pixma iP1600, from Canon (usa.canon.com): Ink-jet photo printer features resolutions as high as 4,800 by 1,200 dpi and prints 4-by-6-inch borderless photos in 70 seconds ($50).

Pixma iP4200, from Canon (usa.canon.com): Ink-jet photo printer features 9,600-by-2,400-dpi resolution and produces borderless 4-by-6-inch prints in 51 seconds ($130).

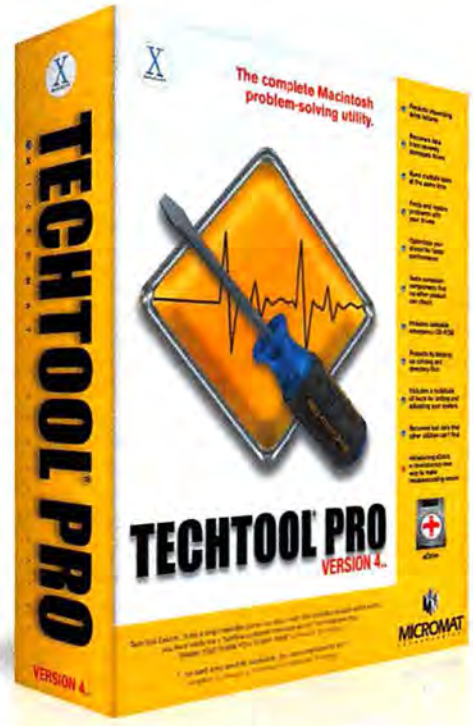
Sidekick, from Sonnet Technologies (www.sonnettech.com): Double-jointed USB 2.0 adapter lets users more easily access recessed or closely spaced USB ports ($13).

EDUCATION BEAT

CrystalMaker 7.0, from CrystalMaker Software (www.crystalmaker.com): Scientific software now has a more flexible engine that handles more complex atomic structures, for display and manipulation on screen ($429; upgrade, $179).

Mathematica 5.2, from Wolfram Research (www.wolfram.com): Computation and digital-visualization application adds 64-bit support for all supported platforms and multicore CPUs. It also includes the Wolfram Notebook Indexer for Spotlight (contact Wolfram for pricing).

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Data Recovery

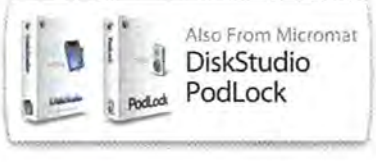
TechTool Pro includes routines that can search a damaged drive and attempt to recover valid files to another location. Hence, even if a drive is damaged beyond repair, you may still be able to save important data that had not been backed up.

Safety

The Safety feature can be configured to protect your drives by automatically creating backups of critical drive directory data. It can also test the computer for developing problems and alert you, both onscreen and via email, if problems are detected.

eDrive

One of the most innovative features of TechTool Pro is the eDrive. This is a bootable Mac OS X partition containing TechTool Pro and a small copy of your system that you can use in an emergency. It is created on one of your hard drives without the need to reformat.

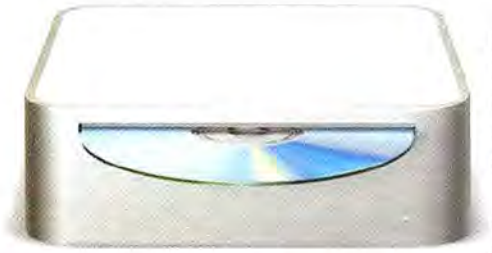


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APPLE EXPANDS RAM AND FEATURES ON iBOOKS AND MAC MINIS

RAM-tastic Updates

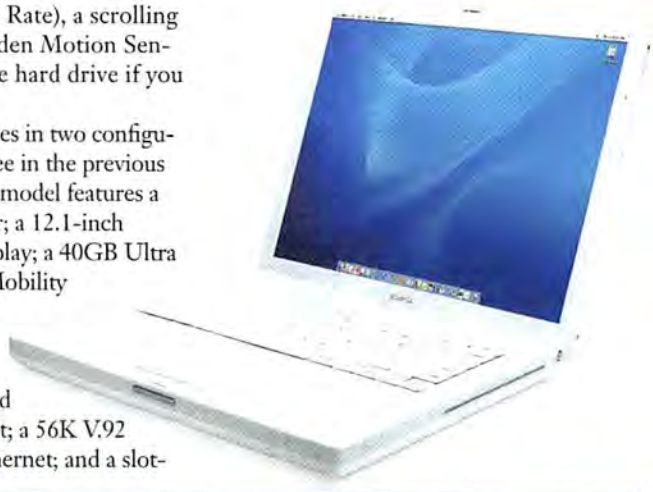


No user should have to upgrade a brand-new Mac to get good performance out of it—and Apple has taken a major step forward by releasing its latest generation of Mac mini and iBook models with a standard 512MB of RAM. (For reviews of the new iBooks and Mac minis, go to macworld.com/0757.)

In addition to more RAM, the new iBook lineup includes faster processors and several features standard in the higher-priced PowerBook line: built-in AirPort Extreme and Bluetooth 2.0+EDR (Enhanced Data Rate), a scrolling trackpad, and the Sudden Motion Sensor (which protects the hard drive if you drop your iBook).

The iBook now comes in two configurations (there were three in the previous generation). The $999 model features a 1.33GHz G4 processor; a 12.1-inch active-matrix TFT display; a 40GB Ultra ATA hard drive; ATI Mobility Radeon 9550 graphics with 32MB of RAM; VGA video output; support for S-Video and composite-video output; a 56K V.92 modem; 100BaseT Ethernet; and a slot-loading Combo drive. The $1,299 model has a 1.42GHz G4 processor, a 14.1-inch display, a 60GB Ultra ATA hard drive, and a slot-loading SuperDrive (the other specs are the same).

Apple is also offering three Mac mini models (up from two models when the mini was introduced in January 2005), with expanded RAM on all and AirPort Extreme and Bluetooth on some models. The $499 Mac mini has a 1.25GHz G4 processor and includes a 40GB hard disk, a Combo drive, ATI Radeon 9200 graphics with 32MB of RAM, 100BaseT Ethernet, and a 56K V.92 modem. The $599 system has a 1.42GHz G4 processor and an 80GB hard drive, as well as AirPort Extreme and Bluetooth. The new $699 model adds to that a SuperDrive.—PETER COHEN AND JIM DALRYMPLE



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14-inch iBook G4/ 1.42GHz	$1,299	512MB/ 1.5GB	60GB Ultra ATA	8× SuperDrive	AirPort Extreme, Bluetooth 2.0+EDR	ATI Mobility Radeon 9550/32MB	macworld .com/0706
Mac mini G4/1.25GHz	$499	512MB/ 1GB	40GB Ultra ATA	Combo drive	none	ATI Radeon 9200/32MB	macworld .com/0707
Mac mini G4/1.42GHz	$599	512MB/ 1GB	80GB Ultra ATA	Combo drive	AirPort Extreme, Bluetooth	ATI Radeon 9200/32MB	macworld .com/0708
Mac mini G4/1.42GHz	$699	512MB/ 1GB	80GB Ultra ATA	4× SuperDrive	AirPort Extreme, Bluetooth	ATI Radeon 9200/32MB	macworld .com/0709

PRODUCTIVITY BEAT

iSync 2.1, from Apple (www.apple.com): Synchronization utility for OS X 10.4 now supports more devices; a complete list of compatible devices is available at macworld.com/0720 (free).

Quantrix Modeler 2.0, from Quantrix (www.quantrix.com): Financial modeling software is now available in a single-user Standard version that complements the enterprise-level Professional version (Standard, $329 per user license; Professional, $990 per user license).

Quicken for Mac 2006, from Intuit (www.intuit.com): Personal finance app adds Smart Payee feature, for easier tracking of downloaded transactions, and integration with Apple's .Mac service ($70; contact Quicken for upgrade pricing).

Studiometry 3.0, from Oranged.net Software (www.oranged.net): Organizational tool for studios and freelancers adds Gantt chartlike planning features and a streamlined interface ($100; upgrade, $30).

The Missing Sync for Windows Mobile 2.0, from Mark/Space (www.markspace.com): Data-synchronization utility for linking Macs with Windows Mobile Pocket PC handhelds adds support for OS X 10.4 and its new Sync services ($40; upgrade, $20).

STORAGE BEAT

1TB Mercury Elite-AL Pro 800 RAID Dual Drive, from Other World Computing (www.macsales.com): External hard-disk system uses two 500GB drives for 1TB of total storage with a FireWire 800 interface ($980).

Biggest S2S, from LaCie (www.lacie.com): Five-bay SATA II RAID external storage tower, available in 1.25TB and 2.5TB capacities, can handle sustained transfer rates of 187MB per second (1.25TB model, $1,999; 2.5TB model, $3,499).

FileSalvage 4.0, from SubRosaSoft (www.subrosasoft.com): Data-recovery software for the Mac, the iPod, and digital cameras adds a file-preview mode and supports more file formats ($90; download, $80; upgrade, free).

G-RAID 1000, from G-Technology (www.g-technology.com): FireWire 800–based external storage uses two high-performance 7,200-rpm, 500GB drives for 1TB of capacity when striped as a RAID Level 0 system, to hold more than 75 hours of DV footage ($1,299).

miniG FireWire F800, from Trans International (www.transintl.com): Storage system sporting a Power Mac G5–inspired look comes in a two-drive or four-drive design with a data-transfer speed of up to 80MB per second (two-drive system, $699 to $1,099, depending on capacity; four-drive system, $1,099 to $2,299, depending on capacity).

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MACROMEDIA UNVEILS STUDIO 8

Not So Fast, Adobe

When Adobe announced in April 2005 that it planned to purchase Macromedia (www.macromedia.com), many assumed that this would mean the end of Macromedia-branded products. But the San Francisco–based Macromedia recently introduced Studio 8, the newest version of its suite of applications for content authoring. The suite contains Dreamweaver 8, Flash Professional 8 (including a new Flash 8 Video Encoder), Fireworks 8, and Contribute 3 and FlashPaper 2, both new to the Studio (see macworld.com/0744 for our in-depth look at the suite).

Two years in the making, Studio 8 is "the biggest software release in the history of Macromedia," says Jim Guerard, vice president of product management and marketing. He adds that this is the most customer-driven release in the company's history.

For Dreamweaver 8, Macromedia's Web-authoring application, the company focused on improving visual CSS. With a new, unified CSS panel, Dreamweaver provides a one-stop shop for working with CSS styles applied to pages. Dreamweaver also includes CSS layout visualization, which allows you to apply visual aids to outline CSS layout borders or color CSS layouts. Dreamweaver also lets users easily integrate Flash Video into a Web site.

Flash Professional 8 now includes document tabs (a feature that was previously available only to Windows users), as well as filters, which make possible designs with built-in filter effects such as drop shadow, blur, glow, bevel, and gradient bevel. There's also a new font-rendering engine, called FlashType, that makes small fonts look clearer and more readable. And Flash Player 8 now uses Apple-supported OpenGL to render graphics, a move that Macromedia says brings its performance very close to that of its Windows counterpart. Flash also adds a new video codec, called On2 VP6, which provides high video quality and small file sizes.

Fireworks, the image-editing application, adds an image-editing panel, which centralizes commonly used image-editing tools, filters, and menu commands in one location. Twenty-six new blend modes including Overlay, Color Burn, and Hard Light are also included. And Dreamweaver users will appreciate the ability to create CSS pop-up menus in Fireworks and then export the graphics and CSS code, ready to be imported into a Dreamweaver document.



Although Guerard says that it's impossible to speculate about how the Adobe deal will affect Macromedia's stable of products, noticeably absent from the suite this time around is FreeHand, Macromedia's drawing and design tool (Adobe's competing product, Adobe Illustrator, is widely considered to be superior). But Guerard insists, "FreeHand continues to be an important and successful product for the company, and we will continue to sell, support, and maintain it as a standalone product."

Macromedia Studio 8 should be available soon; it will cost $999 (upgrade, $399), and you can also purchase each product individually.—JIM DALRYMPLE

FILEMAKER RELEASES VERSION 8

A Better Database

A little less than a year and a half after the last big revision to its database application, FileMaker (www.filemaker.com) is at it again, releasing a major FileMaker Pro update aimed at improving user experience and extending the program's ability to share data (for our comprehensive first look at FileMaker Pro 8, go to macworld.com/0743).

Highlighting the program's improved sharing capabilities is the integration of PDF—users can now save FileMaker data in PDF while preserving the look of a database. You can also add password protection to a PDF file. A new Excel Maker feature lets you save records to a Microsoft Excel file (previous FileMaker versions allowed users only to import Excel files, not export them), and the Fast Send feature allows for easy e-mailing of field contents.



Ease-of-use changes to FileMaker Pro include Fast Match, a feature that allows users to quickly find records matching information from a current field, as well as new layout alignment tools, a new e-mail merge feature, and an enhanced Relationships Graph that makes it easier to create and manage tables and associated relationships.

To aid with data-entry accuracy, FileMaker Pro 8 includes an automatic-completion tool that fills in field content based on previous entries or Value Lists. A spelling checker underlines misspelled words for on-the-fly corrections, and users can use drop-down calendars to enter dates faster.

Of the several FileMaker flavors, FileMaker Pro 8 Advanced (previously FileMaker Developer) underwent the most-extensive changes—it now lets you modify FileMaker menus to execute scripts from menu items; it also includes tool tips, a data viewer, enhanced script debuggers, and the ability to reuse fields, tables, scripts, or script sets.

One piece of news that will please upgrading FileMaker users: current databases won't require any conversion to access the new features of version 8. FileMaker Pro 8 costs $299 (upgrade, $179) and FileMaker Pro 8 Advanced costs $499 (upgrade, $299).—JIM DALRYMPLE


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BOSTON EXPO INCLUDES NOTEWORTHY NEW PRODUCTS

Best of Show

Apple may not have taken part in July's Macworld Conference & Expo in Boston, but other companies did show off some cool new products. As always, the editors of *Macworld* and Macworld.com selected the top hardware and software for our Best of Show awards. Here they are:



SketchUp 5.0, from @Last Software: The latest version of @Last Software's architecture-design tool for OS X users adds Sandbox tools, which aid landscape designers; a vastly expanded component library; enhanced sketching tools; improved file-import and -export support; and more ($495; upgrade, $95; www.sketchup.com).



DLO Transpod for iPod shuffle, from Digital Lifestyle Outfitters: This FM transmitter for the iPod shuffle plugs into a car's cigarette lighter or accessory jack. It can broadcast music over any FM radio frequency, and it charges the shuffle via a USB connector. The device also has a minjack audio input that lets you connect any other headphone-equipped music player or device—such as a CD player or another iPod model ($60; www.dlodirect.com).



Drive + Play, from Harman Kardon: This new iPod car system includes an illuminated navigation wheel—a backlit LCD that you can install in a safe place (that is, where a driver doesn't have to take his or her eyes off the road to see it) and that lets you view the contents of your iPod—and an interface box that connects the iPod to the vehicle and charges it while you're driving. The Drive + Play connects to any car with an auxiliary input jack, but it can send your songs to an FM receiver. It will also route other audio signals—such as satellite radio—to the car's audio system ($199; www.harmankardon.com).

PhoneValet Anywhere and **PhoneValet Podcast**, from Parliant: The $200 PhoneValet software and hardware bundle turns a Mac into a virtual call center—and two new add-ons make it even better. PhoneValet Anywhere lets PhoneValet Message Center 3.0 users access their messages, reports, call log, and phone book from any Internet connection. Parliant is also reaching out to people experimenting with Podcasting, with PhoneValet Podcast, which includes tools for capturing, cleaning, and editing phone-based conversations using VST editions of BIAS's SoundSoap 2 and Peak Express (PhoneValet Anywhere, $80; PhoneValet Podcasting, $75; www.parliant.com).



The Print Shop for Mac 2.0, from Software MacKiev: The new version of Print Shop adds much-requested page-layout functions—it includes rules, gridlines, guidelines, and snap-to capabilities, accessible via menus or a layout palette. A redesigned project window makes it easier to get started, and drag-and-drop support has been added for Apple's iPhoto, Mail, and other applications. Tiger users gain Spotlight search capabilities and eight photo effects that leverage Tiger's Core Image technology. The software can also open files created in Windows versions of Print Shop ($50; www.mackiev.com).—PETER COHEN



INTERNET BEAT

FeedForAll Mac, from NotePage (www.feedforall.com): Software for OS X 10.3.9 and later helps users create, edit, manage, and publish RSS feeds and Podcasts ($40).

.Mac, from Apple (www.apple.com): Online service adds higher-bandwidth option that boosts data-transfer limits to 10GB per month from 3GB ($100 annual fee plus $50 annual fee for higher-bandwidth limit).

Podcast Tuner, from Pariahware (www.pariahware.com): OS X and Windows software helps users find Podcasts, using lists similar to programming guides for cable TV boxes ($10 monthly subscription).

Site Soap, from Talacia Software (www.talacia.com): Software for OS X 10.4 optimizes Web pages, style sheets, and image files for fast loading without reducing quality ($13).

CREATIVE BEAT

iMaginator 2.0, from Stone Design (www.stone.com): Updated image-processing application for OS X 10.4 uses OpenGL and Core Image for improved speed ($49; upgrade, free).

Maya 7, from Alias (www.alias.com): 3-D–modeling and –animation software features a redesigned render-layers function and adds Renderman-compatible variable creasing on subdivided polygon meshes (Maya 7 Complete, $1,999; upgrade, $899; Maya 7 Unlimited, $6,999; upgrade, $1,249).

MotionBuilder 7, from Alias (www.alias.com): 3-D–animation software adds new character extensions and manual feedback on rigs (node-locked version, $4,195; floating license, $4,795).

particleIllusion 3.0, from Wondertouch (www.wondertouch.com): Visual-effects software for creating particle animations adds super emitters, new color options, and interface and productivity improvements ($399; upgrade, $249).

PDFCorrect, from Callas Software (www.callassoftware.com): PDF-correction utility adds a command-line interface after previously being available only as an Acrobat plug-in (contact Callas for pricing).

Portfolio 7.0.6, from Extensis (www.extensis.com): Asset-management software includes added support for Raw digital camera formats, OS X 10.4, and Adobe Creative Suite 2 ($200; upgrade, free).

Toon Boom Animation Studio 3, from Toon Boom Animation (www.toonboom.com): Cross-platform 2-D–animation software adds Free Transform, text, scissors, and skew tools ($329; upgrade, $100).

BEAT ICONS BY PAUL HOWALT

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RIGHT FIRST TIME
EVERY TIME?
JUST A THOUGHT.

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Final Cut Studio

Final Cut Studio is a substantial update to Apple's professional-level postproduction software bundle. Apple has packaged updated versions of its flagship video-editing application, Final Cut Pro 5; its DVD-authoring program, DVD Studio Pro 4; and its motion-graphics app, Motion 2. Also included is the newly created professional audio editor, Soundtrack Pro. (Each of the four products can be purchased separately.)

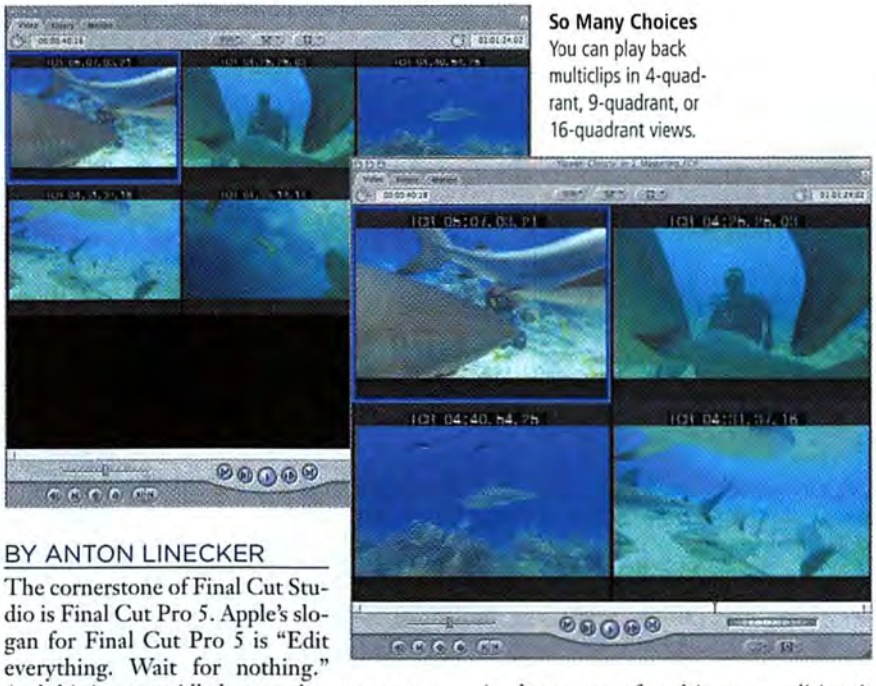
Final Cut Studio is a very attractive and worthwhile buy, especially at $1,299 for the full package (the applications cost $2,096 if you purchase them separately), $699 for an upgrade from Final Cut Pro 4, and $499 for an upgrade from the Production Suite (a bundle containing Motion 1.0, Final Cut Pro HD, and DVD Studio Pro 3).

Everything about Final Cut Studio is big—even the box it comes in. Inside are more than 4GB of software and an additional 41GB of program media, templates, and tutorials. Final Cut Studio allows you to install supplemental support media—including LiveType fonts, DVD templates, and Soundtrack Pro loops—on nonboot drives, something that Final Cut Pro 4 (★★★★; macworld.com/0733) didn't let you do.

You can read more-detailed reviews of each Final Cut Studio product at macworld.com/0700.—ANTON LINECKER

Final Cut Pro 5

Multicamera Editing Steals the Show



So Many Choices
You can play back multiclips in 4-quadrant, 9-quadrant, or 16-quadrant views.

BY ANTON LINECKER

The cornerstone of Final Cut Studio is Final Cut Pro 5. Apple's slogan for Final Cut Pro 5 is "Edit everything. Wait for nothing." And this is not an idle boast—the vast range of video formats and codecs that Final Cut Pro 5 can edit is mind-boggling. New formats for version 5 include native HDV—the consumer-level high-definition video format—and Sony's IMX video format.

Version 5 displays the future of tapeless video production, with its support of Panasonic's P2 technology, which you can import directly into Final Cut Pro via the Import menu (rather than through traditional video capture). Unlike Apple's iMovie HD and Final Cut Express HD, Final Cut Pro 5 handles HDV natively—so it captures video in real time and doesn't degrade HDV's quality. In fact, an HDV clip is as easy to edit as a DV clip with the same number of effects. The only downside to editing HDV in Final Cut Pro 5 is the very time-consuming conform (or render) for final output.

Multicamera Done Right

Final Cut Pro's method of editing multicamera projects is a huge time-saver, and it makes the job a pleasure. The ability to easily edit multicamera footage allowed me to finish an editing project two weeks earlier than I'd estimated.

At the center of multicamera editing is the *multiclip*—a collection of video angles that, once combined, behave as though they were one video clip. When you click on a multiclip in the Browser window, it displays in the Viewer window (see "So Many Choices"). An editor simply clicks on one of the angles to highlight it and edit as usual. Once you edit a multiclip into a sequence, it remains linked with the other clips; at any point, you can easily switch to an alternative video angle.

You can also rapidly cut together a rough sequence on-the-fly with multiclips. Using the Open sync function, located between the Timeline and the Viewer windows, all you have to do is click on the desired camera angles during playback or click on one of the multicamera shortcut buttons, and Final Cut Pro builds a sequence with all the camera switches built in. This type of workflow is ideal for editing concert movies, music videos, and sitcoms.



GO TO WEB:
For a more-detailed review of Final Cut Pro 5, go to macworld.com/0695.

Great New Features

Final Cut Pro has a new Dynamic RT feature that adjusts video quality and frame rates to maximize real-time playback. Dynamic RT is useful when you're previewing effects and video that would otherwise need to be rendered.

Final Cut Pro 5 can capture and output as many as 24 channels of 24-bit audio (with added hardware support, such as video-capture cards). This will have many editors—especially those who work with high-definition formats—cheering.

Integration Is the Key

Final Cut Studio is a bundle of integrated applications, so getting media from one program to another is easy. To access tools found in Motion 2, Soundtrack Pro, and Shake 4, all you have to do is highlight a clip or sequence and choose the proper application from the Send To menu.

While the updated Cinema Tools 3, Final Cut Pro's film-information database, is still a separate application, it's now tightly integrated with Final Cut Pro 5.

Apple has also beefed up Final Cut Pro's XML export abilities. Projects created in version 5 won't open in Final Cut Pro 4, but you can export an XML version of the project that will open in version 4.1 or Final Cut Pro HD (version 4.5).

Media Management

If Final Cut Pro 5 has a weakness, it's in the Media Manager, and it's especially apparent when you try to consolidate your footage for a final, high-quality edit (or "online").

In more than a month of editing with version 5, I was rarely able to create proper project files for onlining. The Media Manager was unable to handle reversed clips if the Delete Unused Media function was enabled in the preferences. Indeed, when this was the case, any reversed clip would be reduced to a single frame in length once the Media Manager was done with it. The Media Manager would also occasionally change the reel name and time-code values for clips.

In Final Cut Pro, there are often various ways to do something, so there are ways to work around the Media Manager altogether (for example, you can use XML exports and drag a sequence's clips back into Final Cut's browser to make subclips). So it isn't an absolute deal breaker, but it is annoying (the version 5.0.2 update did not solve the problem).

Macworld's Buying Advice

Final Cut Pro 5 delivers significant performance enhancements that will make it an essential upgrade for any professional video editor. The multicamera and HDV support, advanced audio capabilities, and integrated Cinema Tools data alone are worth the upgrade price. The Final Cut Studio application integration is the icing on the cake. □

RATING: 4½

PROS: Excellent multicamera editing; native HDV and IMX support; capture and playback of as many as 24 audio channels.

CONS: Flaky Media Manager.

PRICE: $999; upgrade, $399; as part of Final Cut Studio, $1,299

COMPANY: Apple Computer, www.apple.com

ANTON LINECKER is a video technical adviser and filmmaker in Los Angeles.

Compressor Expands

Final Cut Studio's new version of Compressor, Apple's video-compressing and -transcoding program, has very welcome new features. Compressor 2's new look is consistent with that of the other members of the Final Cut Studio family. (Compressor 2 is part of the Final Cut Studio package and comes with stand-alone purchases of Final Cut Pro 5 and DVD Studio Pro 4.)

Compressor 2 includes encoding settings that output to a variety of media, from HD-based DVDs to mobile phones. While most people will use Compressor for MPEG-2 compression for DVD Studio Pro projects, Compressor 2 has many attributes that make it as useful as Autodesk's Cleaner or Sorenson's Squeeze. We encoded high-definition material to MPEG-4 and H.264 for Web delivery, and the results were beautiful and had surprisingly low data rates.

Topping the list of new Compressor features is distributed rendering through Apple's Qmaster, a program first designed for Apple's Shake compositing program. Compressing and transcoding videos can be time-consuming, so harnessing more processing power from other Macs on a local network can help you save time. The most efficient scenario for distributed rendering is in an optimized environment that has a cluster of Xserves and video media stored on a shared Xsan volume, so nothing needs to be copied from computer to computer. But with the 2.0.1 release of Qmaster and Compressor, Apple added excellent support for clusters of older or less-powerful Macs, so using them will still give you a time advantage.—JIM HEID AND ANTON LINECKER



Consumer Boon Final Cut Pro 5 supports editing in native HDV, which preserves the video's quality.

Soundtrack Pro

All-Purpose Sound Tool Cuts Drudgery out of Audio Editing and Design

BY PETER KIRN

Soundtrack Pro isn't just an upgrade to Soundtrack (♦♦♦♦½; macworld.com/0732)—it's an entirely new program with broader capabilities. And despite its beginner-friendly interface, this program packs some amazing power and has automation tools that should attract video and audio pros alike.

Loops and Sound Effects

Soundtrack lacks built-in instruments and the ability to edit scores, but if you're just looking to build a temporary music track by dragging and dropping loops, Soundtrack Pro is perfect. Soundtrack's included sound library adds new sound effects whose variety and quality are easily on a par with those of sound-effects libraries that cost as much as or more than Soundtrack Pro itself. For instance, instead of just using a sound effect of thunder rumbling as is, you can turn it into the basis of a new drum patch, or a low rumble that plays while a video title appears. In the hands of pros, the library is sound-design heaven.

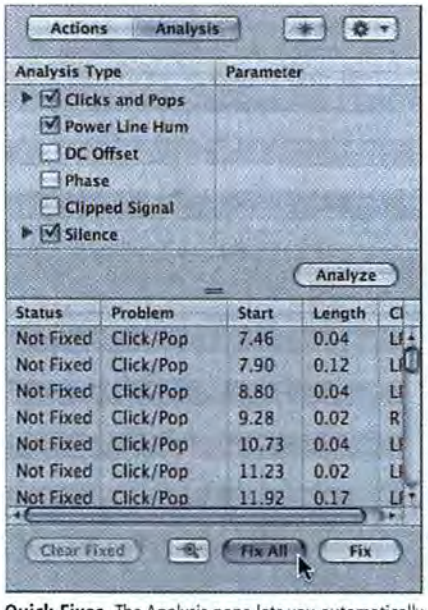
Audio Editing and Effects

Soundtrack Pro functions both as a single-waveform editor, for fine-tuning adjustments to stereo audio files, and as a multitrack editor, for mixing files or creating surround-sound projects.

You can find almost everything in Soundtrack Pro at a glance, and the interface lets you get your work done faster.

Like Apple's video programs, Soundtrack Pro emphasizes flexible, real-time work. Every change you make to a waveform or multitrack project is nondestructive, so you can easily change your mind and make adjustments later with the Actions list.

Also, Soundtrack Pro's documentation on audio fundamentals is thorough and readable.



Quick Fixes The Analysis pane lets you automatically find and fix common sound problems. You can also add each edit to an Automator workflow.

Sound Cleanup

Out of the box, Soundtrack Pro has nearly every tool you'll need for fixing sound problems in video. The Analysis pane automatically checks files for these problems and then lets you fix them individually or en masse; it also has a tool for momentarily zooming in on the waveform view.

Soundtrack Pro's best sound-cleanup feature is the Reduce Noise tool: it can easily and magically reduce hiss, with controls that help keep the sound you want.

Recording and mixing in Soundtrack Pro are similarly easy and elegant. If you're adding narration or recording dialogue, you'll especially appreciate the ability to loop and record, and to select from multiple takes.

Automation and Integration

Soundtrack Pro's automation features can shave hours off of a task-intensive project, but you'll still need AppleScript chops for more-extensive automation. I easily created an Automator workflow that instantly analyzed audio files in a folder, repaired them, and converted their sample rates and file formats. Soundtrack Pro is also tightly integrated with the rest of the Final Cut Studio suite. From DVD Studio Pro, Motion, and Final Cut Pro, you can send any audio clip to Soundtrack Pro and edit it there. However, the number of different options and slight differences between each of the Final Cut Studio applications could easily confuse users.

Final Cut Pro can also export to a multitrack project. You can use this feature to send an audio project back and forth between the video editor and the audio editor, even if they're in different locations. (Some bugs in the program's integration features have been fixed in Soundtrack Pro 1.0.1.)



Look It in the Interface Soundtrack Pro's streamlined interface is similar to those of Apple's other pro apps. The Actions pane (left) lets you adjust, reorder, and A/B (compare the new sound with the unaltered original) each edit you make, nondestructively.

Macworld's Buying Advice

Soundtrack Pro strikes a good balance between the needs of musicians, video editors, audio editors, and multimedia pros. There's no easier or quicker way to perform day-to-day audio-editing chores, repair sound problems, design sound, match audio to video, or automate sound-asset management, on either a Mac or a PC. □

RATING: ♦♦♦♦♦

PROS: Ingenious interface; extensive sound-effects and loops library; integrated video track and viewer; deep audio effects; rich audio-editing and -repair tools; fully integrated with Final Cut Studio; Automator and AppleScript support.

CONS: No multitrack audio recording; slightly different integration options in different Final Cut Studio applications; only a few Automator actions included.

PRICE: $299; upgrade from Soundtrack 1.X, $99; as part of Final Cut Studio, $1,299

COMPANY: Apple Computer, www.apple.com

GO TO WEB:

For a more-detailed review of Soundtrack Pro, go to macworld.com/0696.

PETER KIRN (www.peterkirn.com) is a composer and technology teacher in New York. He's the author of the forthcoming *Real World Digital Audio* (Peachpit Press).

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DVD Studio Pro 4

Forward-Looking Update Adds HD Support and Distributed Encoding

BY JIM HEID

Last year's DVD Studio Pro 3 offered some gorgeous new menu-design and slide-show options (♦♦♦♦; macworld.com/0731). The enhancements in DVD Studio Pro 4 are less cosmetic and more foundational. Because of the nature of DVD Studio Pro 4's improvements, this upgrade, while excellent, may not be a must-buy for DVD Studio Pro 3.X users.



Designing Discs DVD Studio Pro 4 lets you mix and match HD and SD content in the same disc. Here, a main menu contains buttons that, when pressed, play either the SD or the HD version of a movie.

An (Almost) Familiar Face

DVD Studio Pro 4 looks and works the same way its predecessors do. You can work in any of three authoring modes—Basic, Extended, and Advanced—which provide varying levels of control over the authoring process (see "Designing Discs").

If you've used DVD Studio Pro 2 or 3, you'll feel at home with version 4, but your existing projects might not. Apple changed the way DVD Studio Pro renders text in version 4, and when you open a project from an earlier version, its menu text may require formatting adjustments. Because of this annoyance, I don't recommend switching to version 4 while you're in the middle of a project you started with an earlier version. Indeed, it's also smart to keep the older version installed in case you need to burn additional copies of a project or modify your work.

Unfortunately, Apple makes this difficult. The only Apple-recommended method of retaining an older version is to install the new version on a separate startup partition or hard drive—or on a different Mac. If you've created large projects in earlier DVD Studio Pro versions and you anticipate needing to access them again, plan your upgrade strategy carefully.

RATING: ♦♦♦♦

PROS: Forward-looking HD support; powerhouse authoring features; greatly enhanced Compressor application included.

CONS: Installation replaces earlier versions; old projects open with text glitches; slow performance when nudging multiple buttons; some minor documentation lapses.

PRICE: $499; upgrade, $199; as part of Final Cut Studio, $1,299

COMPANY: Apple Computer, www.apple.com

HD for the Few of Us

The most forward-looking addition to DVD Studio Pro 4 is support for high-definition (HD) video. DVD Studio Pro 4 supports HD from several perspectives. For one, you can encode HD video into standard-definition (SD) format.

If you care to tread the bleeding edge, you can create HD-DVDs by encoding your HD video in one of two compression formats: MPEG-2 or H.264. The latter format is the new MPEG-4 variant that's supported by QuickTime 7.

There's just one problem: No current consumer DVD player can play HD-DVDs. If you burn an HD-DVD, there's just one place you can play it: on a Power Mac G5 (not on a Power Mac G4 or any PowerBook) running OS X 10.4 and Apple's DVD Player 4.6.

High-definition DVD players may not be common today, but DVD producers who want to be prepared for the future can start now. You can shoot and edit in HD, and deliver mainstream DVDs in SD. And when HD becomes mainstream, you can swap out your SD assets for HD versions and easily rebuild your project. DVD Studio Pro 4 also makes it easy to create hybrid discs that contain the same content in both SD and HD formats.

Preview of Tomorrow

About those HD discs that play only on certain Macs: they look spectacular. Viewed on an Apple Cinema HD Display, they provide an enticing look at the reach-out-and-touch-it clarity that tomorrow's HD players will provide.

You can now view the simulator preview (which lets you test menus and preview your DVD) on a second Cinema Display. You can also connect an analog monitor for previewing via S-Video. And if you connect a Dolby decoder to your Mac, you can preview surround sound.

Fine-tuning

DVD Studio Pro 4 is more tightly integrated with Apple's Motion than it used to be. If you use Motion to create motion menus and transitions, you can set markers in Motion 2 that tell DVD Studio Pro 4 where to loop a menu or switch a transition.

DVD Studio Pro 4 performed well in my tests, but lengthy delays still occur when you use the arrow keys to nudge the position of multiple buttons on a menu. Apple is aware of the problem but hasn't announced a fix. (The problem persists in DVD Studio Pro 4.0.2, an update that fixes a variety of other bugs.)

Macworld's Buying Advice

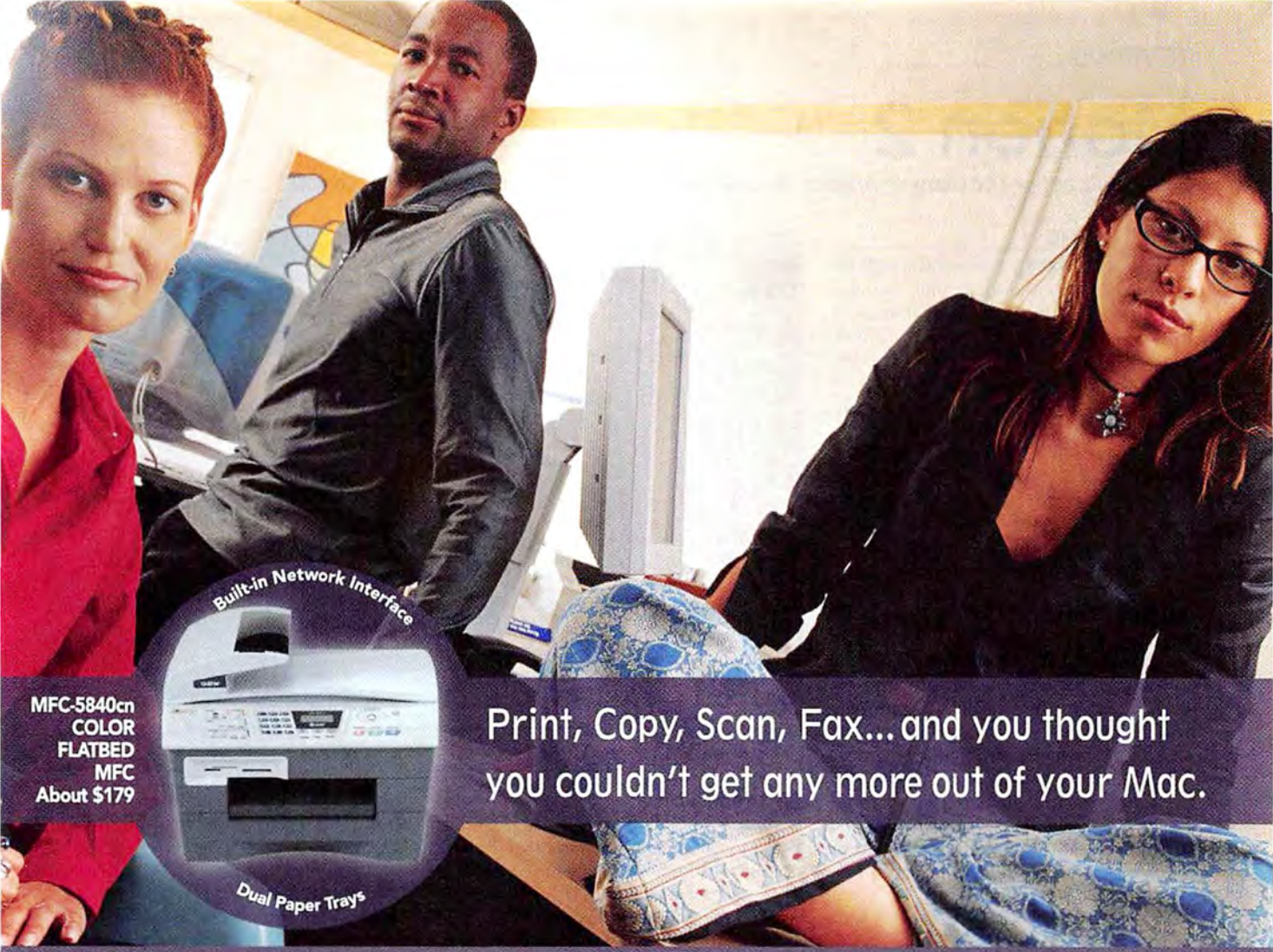
DVD Studio Pro 4 is a jaw-dropping value, offering features that even five-figure DVD-authoring systems can't match. If you're setting up your first DVD-authoring system, look no further. It's a full-featured tool for creating the most-complex DVDs—and a great way to prepare for the age of high-definition DVD.

But if you're using DVD Studio Pro 3 and high-definition video isn't on your radar, consider sticking with version 3. □

GO TO WEB:

For a more-detailed review of DVD Studio Pro 4, go to macworld.com/0698.

Contributing Editor JIM HEID has used DVD Studio Pro to author more than ten training DVDs, including the one that accompanies his book *The Macintosh iLife '05* (Peachpit Press/Avondale Media, 2005).



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Motion 2

Apple's Latest Motion-Graphics Tool Puts the Moves on the Competition

BY BEN LONG

Motion 1.0 (★★★★½; macworld.com/0730) provided video editors and motion-graphics pros with an excellent alternative to programs such as Adobe After Effects. Motion 2 builds on the original program, with improved performance, support for high-bit graphics formats, and astonishingly simple After Effects integration.

Motion is not a full-blown compositing application designed to compete with the likes of After Effects or Autodesk's Combustion (for that, Apple makes Shake). Instead, it's designed to be an exceptional complement to any of those products.

All Real Time, All the Time

Motion provides several different ways of working. Using the simplest approach, you can drag media elements directly into the Canvas monitor to add them to your current composition. To create animation, you can drag a behavior from the program's Library directly onto any media element.

Motion also provides a full-blown timeline and keyframing interface that lets you easily tweak timing and parameters. There's also a hierarchical Project pane, which makes managing projects easy.

Apple improved Motion 2's keyframe editing by adding editable velocity curves. Function curves are a familiar, welcome addition to Motion's array of keyframe-editing options, and they make it much easier to script the velocity of a layer.

Motion's real-time playback is really a pleasure. You can edit your animation in basically any way you want, and your animation will update immediately. Sketch out an animation and begin playing it—and while it's playing, you can refine and tweak it and get immediate feedback.

Motion's new MIDI behavior lets you assign any filter or parameter to any type of MIDI controller. This allows you to configure a MIDI controller to "play" Motion in real time using buttons and dials, giving you the type of control that a dedicated hardware device would usually provide.

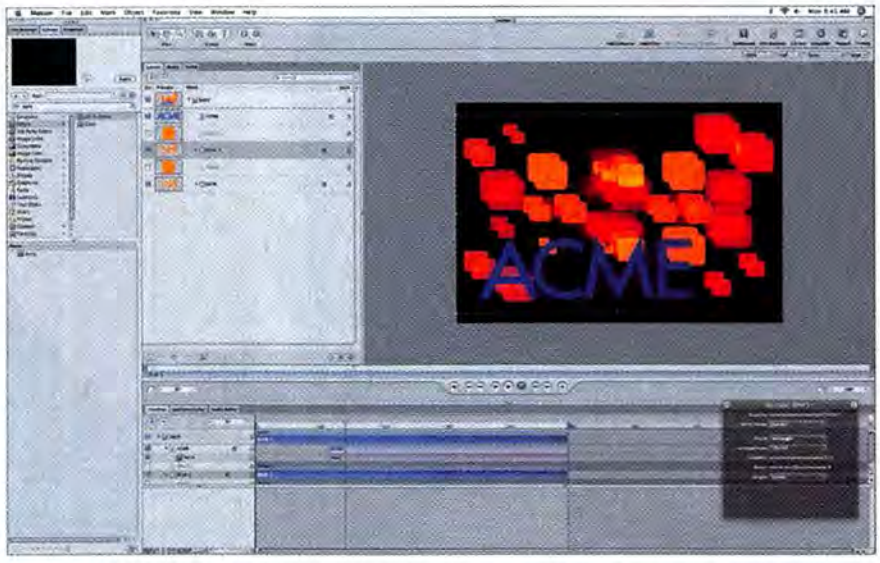
RATING: ★★★★½

PROS: Real-time playback and editing; 16- and 32-bit media support; Replicator feature for creating complex textures and patterns; Basic 3D filter for simple 3-D simulation; MIDI control; After Effects integration; low price.

CONS: No true 3-D environment; no motion tracking or stabilization.

PRICE: $299; upgrade, $99; as part of Final Cut Studio, $1,299

COMPANY: Apple Computer, www.apple.com



Replicate This Motion 2's Replicator lets you create complex geometric, repeating patterns using a single graphic element and a few simple parameters.

Faster Motion

On a dual-2.5GHz Power Mac G5, Motion 2 is as much as ten times faster than its predecessor. Motion exploits your computer's GPU, so the better your video card, the better the program's performance.

In addition to the performance boost, Motion 2 adds welcome support for 16- and 32-bit float media (a high-end color space critical to motion-picture work), so it's suitable for high-end HD and for creating motion graphics. (Float-media support is available only when you're using OS X 10.4.)

New Tricks

In addition to behaviors, Motion 2 packs more than 100 hardware-accelerated filters, including a handful of new ones. The most notable of these is Basic 3D, which lets you spin any layer. Motion still lacks a true 3-D environment—you can't set multiple cameras or move objects within 3-D space—but Basic 3D does a good job of simulating one.

Version 2 has improved on the program's After Effects support, and more significantly, Apple has released a plug-in API that allows third parties to create FxPlug filters—Motion-compatible plug-ins that can take advantage of the program's hardware acceleration and unique interface elements. Plug-in vendors such as Zaxwerks, dvGarage, and Boris have already announced Motion plug-ins.

Motion also now supports third-party Image Unit plug-ins, which are based on Tiger's Core Image and Quartz technologies. Image Units are rapidly gaining popularity, but they're available only in OS X 10.4.

The Replicator

Simple flying text is not enough for today's motion-graphics aesthetic; you also need to have cool flowing textures and animated environments for your text to fly through. Motion 2's Replicator facility makes creating these sorts of textures and designs very easy.

You can apply a Replicator to any shape, whether it's a still-frame image or a movie. Replicators automatically create multiple instances of your source object. You can then embed other behaviors alongside the Replicator to create complex moving patterns of repeating elements, from natural, flowing textures to repeating geometric patterns that look like something created with a Spirograph toy.

Macworld's Buying Advice

Motion 2 is an excellent motion-graphics tool. Sure, it'd be nice if it had a real 3-D environment and some motion-tracking and -stabilization controls, but these are minor problems that don't diminish the program's incredible performance and workflow capabilities. □



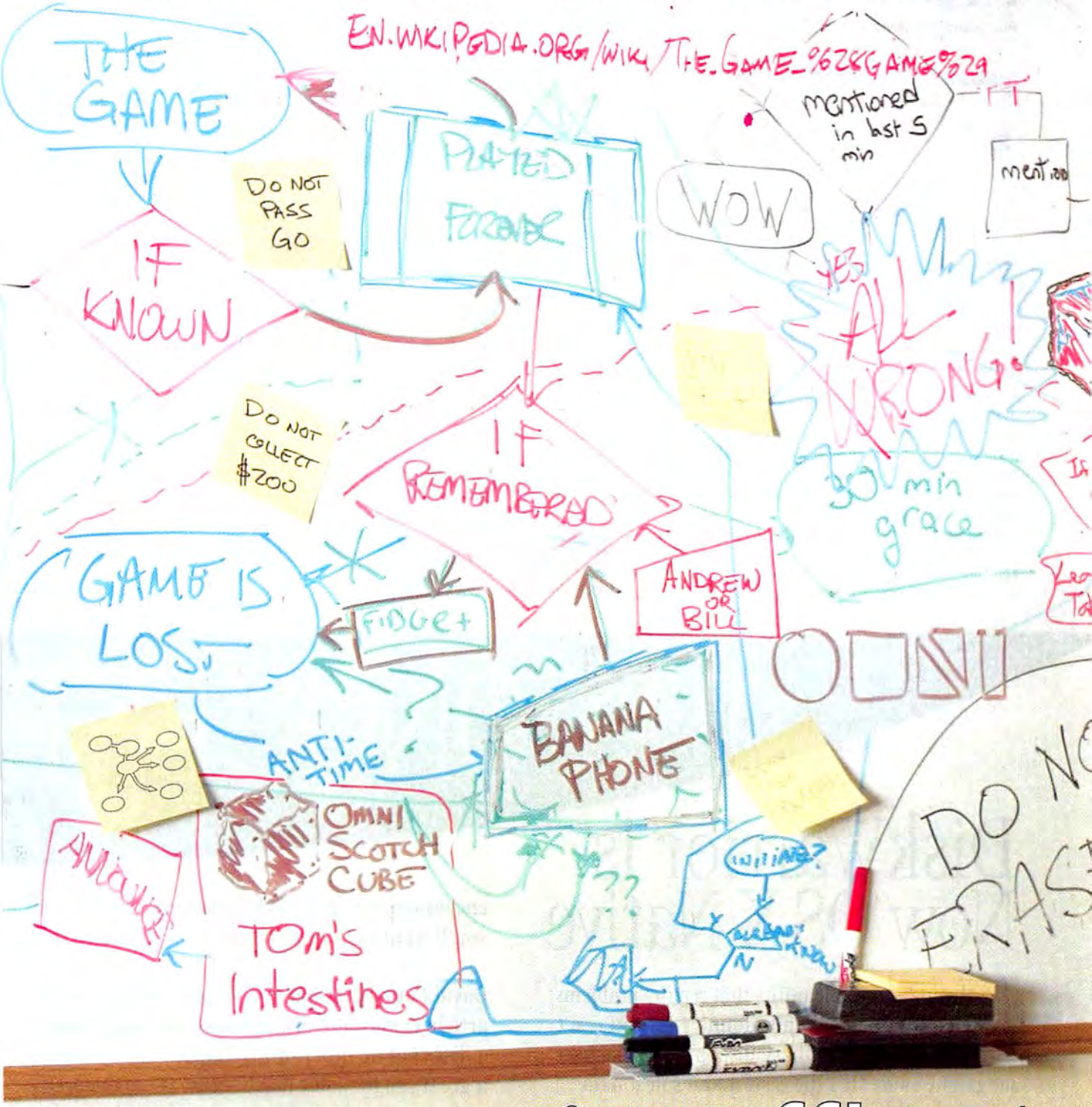
GO TO WEB:

For a more-detailed review of Motion 2, go to macworld.com/0697.

BEN LONG is the author of *The Digital Filmmaking Handbook*, third edition (Charles River Media, 2005).

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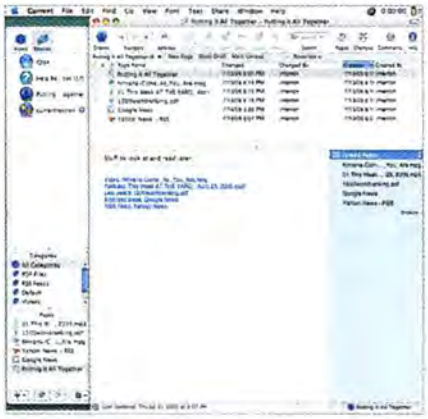
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Current 1.5 ▲ ($50), from Near-Time (www.near-time.com): Current combines a word processor, a content organizer, a Web browser, a blogging client, an RSS news reader, and more into one integrated application. It promises (and delivers, to some extent) a lot of functions that will make people who collect and organize content drool. But users pay the price in interface complexity (macworld.com/0711).

CyberTablet 8600 ($130), from Adesso (www.adesso.com): Because of their batteryless pens, Wacom's Graphire3 tablets score higher than the CyberTablet. But Adesso's tablet costs $70 less than Wacom's least-expensive 6-by-8-inch tablet. If you're planning to use the CyberTablet with Photoshop, you should first contact Adesso to find out whether it will work with the app (macworld.com/0717).

Finale Songwriter 1.0 ($50), from MakeMusic (www.makemusic.com): Finale Songwriter 1.0 succeeds in providing traditional entry-level composers with the tools they need in order to produce a printed score. The flexibility with which you can enter notes and the quality of the output make it clearly better than pen and paper (macworld.com/0715).



FlashTrax XT ▶ (40GB, $400; 80GB, $500), from SmartDisk (www.smartdisk.com): The FlashTrax XT is a very useful, multifaceted device that has expanded its target audience to include on-the-go multimedia users. The FlashTrax XT stores and displays still photos quite well, but you can't rotate images or see photographic EXIF data. The unit's recording capabilities, excellent audio and video playback, and improved LCD screen make it a very good product indeed (macworld.com/0712).



FotoChute ◀ ($200), from SmartDisk (www.smartdisk.com): If all you need is a small, inexpensive way to clear your media card, the FotoChute's size, speediness, and low price make it compelling. Though the LCD comes in handy for checking how many images are stored on the unit, it's kind of superfluous, so you may want to save $40 and buy the screenless version. And the FotoChute's Mac compatibility can be flaky (macworld.com/0716).

InterWrite MeetingPad ($585), from GTCO CalComp Peripherals (www.gtcocalcomp.com): The InterWrite MeetingPad may be the interactive electronic whiteboard hardware-software combo that meets school and company budgets. It's particularly well suited for businesses that are adept at and open to using new technologies. For technology-savvy educators, the analogous SchoolPad

THE CONQUEST

DiskWarrior is Now OS X Native

It's the indispensable utility that repairs problems such as disks that won't mount, files you can't trash, and folders that have disappeared. MacUser magazine said, "It's the fastest and safest data recovery utility you can buy."

Macworld magazine said, "DiskWarrior is by far the best disk utility available for the Mac; it can repair virtually any disk problem you may encounter...and it is likely to become the only tool you'll want to keep with you at all times."

David Coursey, ZDNet AnchorDesk, agrees in an article comparing disk utilities. He used it to fix a disk that no other utility could. "DiskWarrior is a great product, not just because it fixed a pretty serious screw-up, but because it showed me what it planned to do in minute detail before doing it."

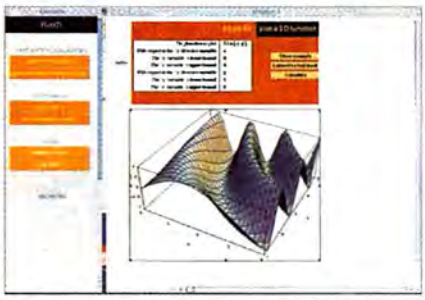
But disk damage isn't the only threat to your data. As hard drives get older, the drive mechanisms

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could be a worthwhile investment, ultimately saving teachers time once it's fully integrated into lesson plans (macworld.com/0710).



Mathematica CalcCenter 3 ▲ ($595; Academic version, $195; student price, $100), from Wolfram Research (www.wolfram.com): CalcCenter 3, for students and novices, costs less than a typical math textbook and does all the problems for you. You can't beat that. Even old-time Mathematica users will find it convenient for quick work on small problems (macworld.com/0714).

Nik Sharpener Pro 2.0 (Complete Edition, $330; Inkjet Edition, $170), from Nik Multimedia (www.nikmultimedia.com): If you're at all serious about sharpening your images, or if you do a lot of it, Nik Sharpener Pro 2.0 could become your most trusted assistant. It's easy to use, and the results are often far superior to what you'd get with trial-and-error use of Photoshop's tools. The price is a bit high for casual users, since the program is targeted at advanced users. That's unfortunate, because an increasing number of hobbyists and advanced amateurs would find this plug-in helpful and easy to learn (macworld.com/0713).



PGP Desktop Home 9 ▲ ($99), from PGP (www.pgp.com): Since its introduction in 1991, PGP has worked best at encrypting communications and has been less successful at making public-key encryption approachable for normal human beings. The latest version of the product makes it much easier for average folks to ensure that their communications and documents remain hidden from unintended eyes (macworld.com/0719).

Phlink 2.2 ($150), from Ovolab (www.ovolab.com): With its amazing AppleScript powers, an iTunes-like interface, and Tiger-only enhancements, this phone-message–recording software extends the digital lifestyle into the realm of telephony. Phlink 2.2 resolves most of the previous version's problems—namely, it adds call-logging and notation capabilities. But script-phobic users may long for more built-in features (macworld.com/0718).

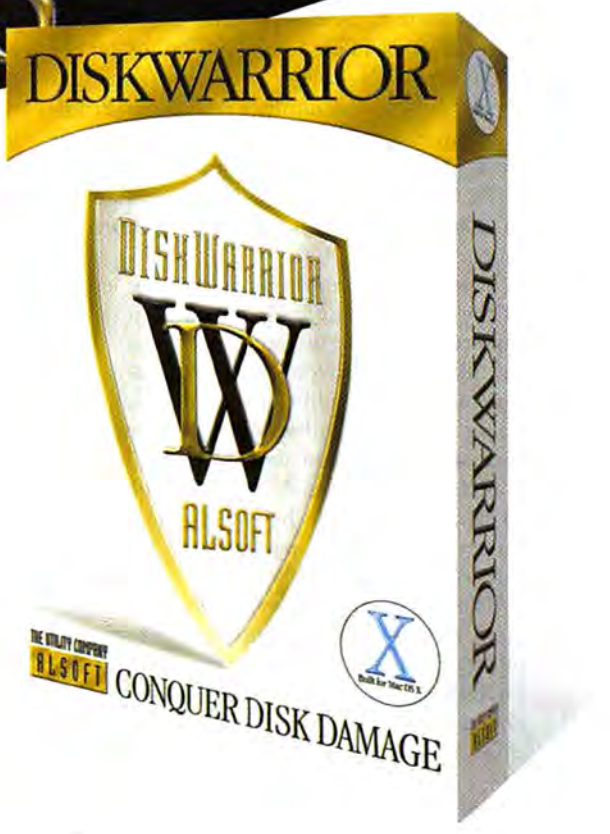
PHOTOGRAPH COURTESY OF APPLE

COLOR-SCREEN PRICE DROP

New iPod Lineup

20GB iPod ▶ ($299; 60GB model, $399), from Apple Computer (www.apple.com): Apple tweaked the full-size iPod line by dropping the $299, 20GB standard model and the $349, 30GB iPod photo and adding a $299, 20GB iPod with a color screen. At the same time, Apple dropped the *photo* moniker from the existing 60GB iPod photo and lowered its price. The result is the merger of the standard iPod and iPod photo lines into one color-screen product line. These new iPods have high-end features at standard prices: they're easily the best iPod values yet (macworld.com/0728).

CONTINUES



begin to malfunction. Eventually, the malfunctions become so severe that the drive simply stops working. DiskWarrior can automatically test for hardware malfunctions, giving you the chance to back up your data before it's too late.

Be prepared. Don't wait until after you have a disk disaster to buy your copy of DiskWarrior. Bob LeVitus, aka Dr. Mac, said, "I feel naked without DiskWarrior." You can believe MacHome magazine when they said, "DiskWarrior is a quick, one-click solution to faster, more stable hard drives."

Game Room

BY PETER COHEN

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It's the *Other* Tiger Play as Tiger Woods or as your own custom-designed golfer and compete for fame, sponsorships, and money in the visually stunning Tiger Woods PGA Tour 2005.

GOLF SIMULATION

Tiger Woods PGA Tour 2005

Tiger Woods PGA Tour 2005, from Aspyr Media, is the closest most of us will ever come to the world of professional golf. The game puts you in control of Tiger himself—and other legendary PGA pros—as you prove your mettle against some of the toughest opponents on the toughest courses in the world.

An update to the already stellar 2003 version, Tiger Woods PGA Tour 2005 builds on the strengths of the earlier game and adds new capabilities. For example, a new Tiger Proofing feature lets you revamp courses to make them more difficult—by tightening up the holes, expanding sand traps and water hazards, shrinking the width of fairways, and more. It's quite challenging.

If you aren't interested in playing as one of the game's many built-in pro golfers, you can create a golfer in your own likeness (or in the likeness of anyone else you choose, for that matter). In addition to outfitting your golfer in custom clothes, sunglasses, and other accessories, you can adjust the body type, complexion, and facial structure right down to manipulating brow height, chin length, and nose type. It's startling just how much you can do.

The basic game play is similar to that of previous versions. As a golfer who's just starting out on the PGA circuit, you begin with fairly limited funds and capabilities. You can improve yourself by winning bets (chip and putt sessions, for example) or by winning one-on-one pickup games against fictitious, computer-controlled players. You can roll the money you win in these contests over into lessons and other improvements.

If you do particularly well, you'll catch the eye of equipment manufacturers, who will offer you money in return for endorsing or using their products. If you become good enough, it's conceivable that you'll even pass Tiger Woods on the money list someday.

If you're accustomed to playing golf games that require two or three mouse-clicks to swing the club, you may find that Tiger Woods's True Swing method is a little off-putting at first. You hold down the mouse button and swing the mouse back and forth to control your on-screen persona. How precisely, smoothly, and quickly you do this determines the speed and accuracy of your swing. Careful control of the mouse can generate hooks, slices, and other effects.

The 2005 edition's graphics are even better than the previous version's. Environments look

continues

RATING: ★★★★½
PROS: Tiger Proofing adds challenge to courses; you can fully customize golfers.
CONS: Announcers get repetitive; high system requirements.
PRICE: $40
COMPANY: Aspyr Media, www.aspyr.com

News Feed



Fable Coming to the Mac

This fall, Feral Interactive (www.feralinteractive.com) plans to release Fable: The Lost Chapters for the Mac. This expanded version of the popular Xbox role-playing game Fable will sport additional content and improved graphics.



Mythic Fighting

If you're looking for a Mac fighting game akin to console games such as King of Fighters and Soul Calibur, keep your eyes peeled for Mythic Blades, coming to the Mac sometime this fall, from Vermillion Games (www.vermilliongames.com) and Cartel Games (www.cartelgames.com). It features heroes and monsters from Greek legend.

Get Your Game On

BlizzCon (www.blizzcon.com), Blizzard Entertainment's first gaming festival, takes place on October 28 and 29 at the Anaheim (California) Convention Center and offers tournaments, concerts, and plenty of opportunities to play World of Warcraft, StarCraft: Ghost, and other Blizzard-related games. Tickets cost $120.

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real, character animations are incredibly lifelike and detailed, and fans in the gallery standing off to the side of the green are more detailed than before. The behavior of a character when he or she hits a difficult putt can get annoying fast—especially when it evolves from raised power fists to full-blown handstands—but you can skip these animations by pressing the escape key.

Sound is top-notch as well. PGA experts comment on your game, sometimes offering indirect advice ("This green lies a bit to the left," "This shot looks straight," and so on). It gets slightly irritating after a while but is nonetheless helpful. And it's a nice morale boost to hear the fans cheering when you whack your ball 325 yards or more on a long par 5.

Bear in mind that Tiger Woods PGA Tour 2005 is a serious simulation—if you're looking for an arcade golf game, check out Garden Golf instead (see "Top Downloads"). Because of the game's advanced physics and graphics, you'll need a 1.2GHz or faster G4, as well as a fast graphics card (an ATI Radeon 9000 or Nvidia GeForce FX 5200, or better).

You can play against other Mac gamers online. GameRanger is supported, too, so finding opponents shouldn't be difficult.

The Bottom Line If you're looking to experience the thrill of golf from the comfort of your Mac, Tiger Woods PGA Tour 2005 is for you.

REAL-TIME STRATEGY

Commandos Battle Pack

RATING: ♦♦♦♦
PROS: Two games in one package; varied mission structures keep you on your toes.
CONS: Pedestrian sound effects; complex keyboard commands.
PRICE: $40
COMPANY: Feral Interactive, www.feralinteractive.com

Real-time–strategy gaming meets World War II action in Feral Interactive's new Commandos Battle Pack, a combo that brings Commandos 2: Men of Courage and Commandos 3: Destination Berlin together in one package for the first time on the Mac.

In both Commandos games, you lead an elite team of Allied operatives on covert missions behind enemy lines in Nazi-controlled Europe. Mission goals range from completing simple run-and-kill assignments focused on amassing high body counts to rescuing prisoners of war. Secondary objectives, such as quieting enemy sentries, will further test your skills.



Two Games for the Price of One Experience World War II action and strategy in Commandos Battle Pack.

The games' graphics are rendered in isometric perspective, providing a break from the 3-D graphics that have permeated the real-time–strategy and –action market in recent years. This puts them within reach of relatively modest systems (Commandos 2 demands a 500MHz or faster Mac, while Commandos 3 requires an 867MHz or faster Mac). It also means that the games lack some of the flash you'd expect from 3-D–action games such as Splinter Cell.

Although the action is rendered isometrically, you can rotate the battlefield in 90-degree segments, so you can see behind buildings and other obstructions. You can also zoom in and out, to get a clearer idea of enemy positions on the battlefield, for example. It'll take you some time to learn your way around the keyboard, so have patience.

The graphics system makes it easier to recognize enemy movement patterns and detect repetitive behavior than is typically possible in a polygonal, 3-D game, which makes Commandos slightly less challenging.

Although the games use the same keyboard commands, take place in the same era, and play similarly, there are noticeable differences between the two. For example, Commandos 3 features occasional indoor sequences and character animations that are rendered in 3-D. The music in both games is grand and cinematic, evocative of World War II action movies. Unfortunately, the sound effects are pedestrian and repetitive.

The Bottom Line Commandos Battle Pack is a good value—two games in one package. Isometric strategy games don't

continues



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THE EVOLUTION OF DIGITAL ART
BERT MONROY

Bert Monroy embraced the Mac as an artistic medium with the introduction of the Mac 128 in 1984. In this evening talk, open to all, Bert will take you on a journey through the evolutionary transformation of the Mac from its beginnings with MacPaint to its current status as the preferred tool of graphic artist throughout the world.

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SEMINARS

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appeal to everyone, but these are great examples of the genre and are well executed on the Mac.

ACTION GAME

Diner Dash

RATING: ♦♦♦
PROS: Career and Endless Shift modes help mix it up; special customers provide extra challenges.
CONS: Frustrating at higher levels; insufficient sound cues.
PRICE: $20
COMPANY: PlayFirst, www.playfirst.com



Go with the Flo Help Flo build a restaurant empire in Diner Dash.

Meet Flo. Tired of the rat race, she's quit her job as a stockbroker. Now she's trying her hand at running a restaurant, and it's up to you to help.

In PlayFirst's Diner Dash, Flo is a veritable cyclone of activity: she's in charge of everything from seating customers to taking their orders to serving and cleaning up after them (fortunately, there's a cook in the kitchen to make the meals). It's a bit like the classic arcade game Tapper—except instead of just beer, you're serving up full meals.

The faster Flo waits on tables, the happier the customers are, and the bigger the tips they're likely to leave behind. The more tips she collects, the more money Flo can roll into her business. Each new level brings with it a new revenue goal, which helps Flo grow her business from a greasy-spoon diner to a real honest-to-gosh restaurant with tablecloths and everything. Fail to meet the level's revenue target or

continues

Top Downloads | Garden Golf



If you can't get out to the local miniature-golf courses this summer, you can at least play a few rounds on your Mac. FunPause's Garden Golf is mini golf stripped to its basic essence. The game features three 18-hole golf courses with plenty of traditional mini-golf hazards: water, steep inclines, and 90-degree banks. There's even the occasional windmill.

The game doesn't offer a multiplayer option. That's good and bad—no need to mess with finicky Internet game-matching systems, but also no chance to compete with other players on the same computer, which would have made the game more family-friendly.

You position your golfer by moving the mouse. Click and hold the mouse button, and the golfer's swing speed (represented by an on-screen meter) will begin to climb. Release the button when you've gained enough power. Although the process is manageable with practice, I would have preferred the ability to hold down a modifier key to let the game know I wanted to aim my swing. Instead, it presumed that any arbitrary cursor motion was meant to move the golfer.

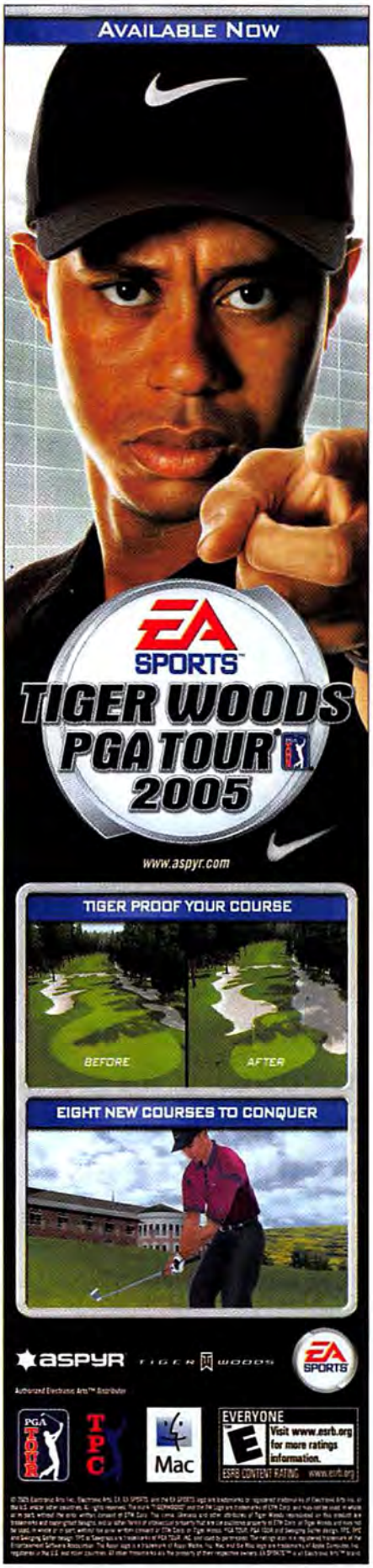
Garden Golf requires a 400MHz G3 or faster Mac running OS X. I wish it offered the option to play in windowed mode—an amenity I've grown accustomed to in many other commercial and shareware games in recent years.

The game's graphics are cartoonish, whimsical, and lighthearted. However, the sparse image detail away from the hole often left me wanting more.

You can download a one-hour playable demo to try the game out before you buy.

The Bottom Line Garden Golf is an innocuous, if unremarkable, take on miniature golf. Low system requirements may make it appealing to users of older Macs; however, its control system may frustrate many players.

RATING: ♦♦♦
PROS: Choice of male or female golfers; three courses; easy to play.
CONS: Frustrating controls; absence of options.
PRICE: $20
COMPANY: FunPause, www.funpause.com



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upset customers enough to make them leave, and that will cost Flo a star—lose all the stars, and the game ends.

Fortunately, Flo is good at multitasking: she can carry dishes in one hand while bringing another customer the check. To succeed, you'll have to figure out how to maximize Flo's efficiency. Waste too much time by making multiple trips from the counter to the table, and you'll likely cost Flo some money in tips.

The game has 50 levels, and several different types of regular customers. Seniors, for example, are willing to wait longer for a table, but they don't tip as well. Businesswomen are good tippers but quite impatient. And heaven forfend if you don't treat the restaurant critic well—she'll cost you points if she leaves unhappy. Young ladies, college students, and "Mr. Hot Shot" complete the mix, all with their own personalities.

Diner Dash features a hand-drawn cartoon style that's cute and family-friendly. The soundtrack and sound effects are adequate. However, I wish there were more audio cues to let you know when it's time to take action. You'll hear the chef ring a bell when it's time to pick up an order, but otherwise you need to keep a careful eye on the screen.

Controlling Flo is a simple point-and-click affair, but I was occasionally frustrated by the game's pickiness. I'd click just slightly off of the target and nothing would happen. You can download a timed demo to try it for yourself.

The Bottom Line Diner Dash is a fun, if somewhat frustrating, action arcade game that harks back to the classics. If reliving your Tapper days sounds like a good time, give it a shot.

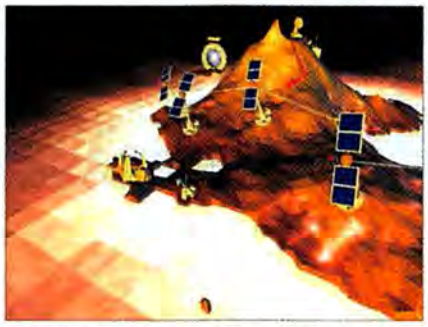
REAL-TIME STRATEGY

Darwinia

RATING: ♦♦♦
PROS: Retro graphics and audio; varied mission structures.
CONS: Gesture-based system gets irritating; game play is short.
PRICE: $30
COMPANY: Ambrosia Software, www.ambrosiasw.com

Ambrosia Software's Darwinia combines a deliberately retro look with a modern real-time–strategy twist.

In the game, you must save the Darwinians—denizens of a virtual theme park—from a raging computer virus that has multiplied out of control. To do that, you'll create programs called Squads and Engineers, which act as your weapons. Squads eradicate the virus, leaving behind diamond-shaped shards described as souls of corrupted Darwinians. Engineers then collect those souls and drop them into an Incubator, which converts them back into healthy, uncorrupted Darwinians.



Only the Tough Survive Save the Darwinians from a deadly computer virus in the decidedly retro Darwinia.

What makes the game unusual is the way you access Squads and Engineers. You must use your mouse to draw a gesture on the screen, in an interface called the Task Manager. The last game I saw with a gesture-based interface was Harry Potter and the Chamber of Secrets. It irritated me then and it irritates me now. The fact is, in the heat of a viral outbreak, the last thing I want to be bothered with is making sure that my mouse gesture is correct.

The game's tasks change from level to level. Sometimes you'll need to eradicate viruses wherever they pop up; sometimes you'll have to refine or mine resources from the Darwinian world. However, the game itself is relatively short—there are fewer than a dozen levels from start to finish.

One particularly attractive aspect of the game is its retro sensibility. To evoke the spirit of old video games, Darwinia uses shaded polygons with rough shapes (the incessant march of the Red Virus reminded me of Centipede, for example). The audio is similarly inspired by old-school games. For this 1980s gamer, it proved to be a *very* appealing combination.

The Bottom Line Darwinia is an ambitious, though flawed, game. The same gesturing system that sets it apart from other strategy games is also its greatest weakness. If you like the retro vibe, give Darwinia a try. But don't be surprised if you tire of it quickly. □

Macworld.com News Senior Editor PETER COHEN prefers to eat at restaurants, not run them.



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AIRPORT EXPRESS BASE

AirBase

As someone who's been reviewing software and hardware for a while now, I like to think that I have a fairly reliable gut reaction to new products. But I admit to being wrong about Griffin Technology's $25 AirBase (★★★★; www.griffintechnology.com), a stand for Apple's AirPort Express base station. When I first saw it, my immediate reaction was "$25 for a glorified power cable?" But after using the AirBase, I've come to the conclusion that my initial impression was dead wrong—the base is quite useful.

The bottom of the AirBase is a weighted metal piece (the entire unit weighs a hefty 9 ounces), with a 3.25-by-2.75-inch rubber foot to keep the unit from sliding around on a desk or shelf. The top of the AirBase is made of white plastic and provides an AC connector that takes the place of the AirPort Express's removable plug—you slide your AirPort Express onto the connector to seat it securely in the AirBase. You then use the included cable to connect the AirBase to an AC outlet.

But what does the AirBase actually do that makes it worth a $25 price premium over the AC plug that comes with the AirPort Express? First, it lets you place your AirPort Express on a desk or shelf—where it's less prone to obstruction by furniture and other solid objects—to improve AirPort reception (and it really works). Second, the AirBase puts your base station in an accessible location, making it easier to connect and disconnect Ethernet, USB, and audio cables quickly—or to grab the Express itself when you're heading out on a trip. Third, placing the Express's indicator light in a more visible location is useful for diagnosing connection problems. Finally, the rear of the AirBase has a metal cable-management loop that helps reduce cable clutter. Oh, and did I mention that the AirBase also looks great? It's definitely a conversation piece.

So I freely concede that my initial reaction to the AirBase was, um, off base. Perhaps the AirBase is just one of those products you have to use to appreciate.



Elevated AirPort Increase reception, reduce cable clutter, and easily view the status light of your AirPort Express with the AirBase.

CONTEXTUAL-MENU ITEM

Move Items X 1.5.7

Many Mac users would like to use contextual menus to move files and folders in the Finder—especially switchers, who had such an option in Windows. For those people, I suggest Naratt's $15 Move Items X 1.5.7 (★★★★; www.naratt.com), which lets you move, copy, or make aliases of items from the comfort of contextual menus. (Move Items X actually comprises three plug-ins: Move Items, Make Alias, and Make Copy. You can install all three or just the ones you want.)

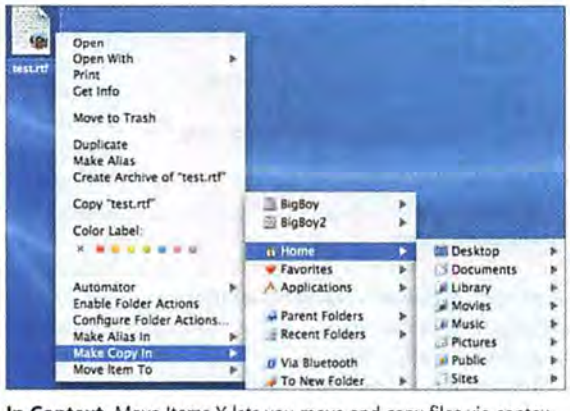
Move Items X adds Make Alias In, Make Copy In, and Move Item To options to the Finder's contextual-menu window, and each item is actually a hierarchical menu in which you can find a list of useful locations: mounted volumes, your Home directory, and your Favorites and Applications folders. You can also browse the parent folders of the current folder, as well as any folders you've recently accessed via Move Items X. The hierarchical menus allow you to quickly navigate to any location on your Mac; choose a folder in one of these menus, and Move Items X will copy or move the selected item to that folder or make an alias of it there (depending, of course, on which command you choose).

Move Items X offers two other useful items: To New Folder, great for creating a new folder on-the-fly and then moving selected items to it; and Via Bluetooth, for sending selected items to a Bluetooth device via OS X's Bluetooth File Exchange utility (assuming your Mac is Bluetooth-capable).

In Move Items X's preferences, you can opt to have the destination folder open in the Finder after the action is complete; view documents inside folders (so you can see if a file already exists in the destination folder); and choose which types of directories—volumes, Home, Applications, and so on—appear in Move Items X's menus. You can also modify the appearance of item names and icons.

Chances are these features alone will satisfy most people, but Move Items X includes an array of additional options for more-advanced users. For example, you can choose to show invisible folders in Move Item X's menus. And developers will appreciate the ability to display bundles and packages as folders, making it easy to modify their contents.

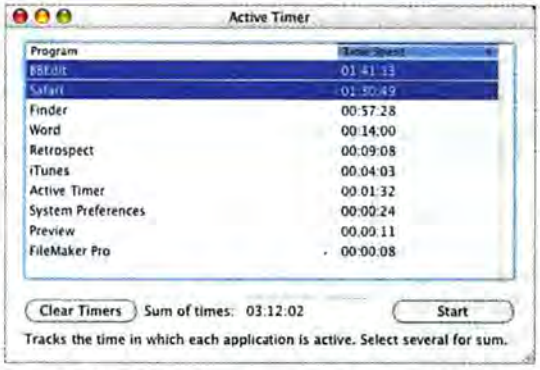
Move Items X is also useful for quickly cleaning up a folder (such as the Desktop



In Context Move Items X lets you move and copy files via contextual menus, just as you can do with text.

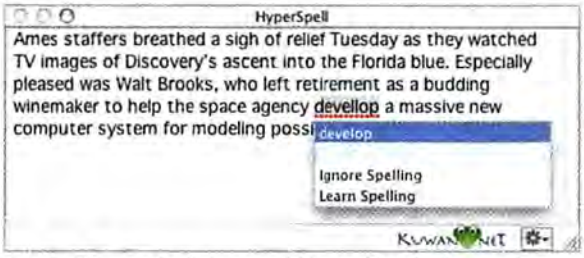
folder). Select a bunch of wayward files and then choose Move Item To: To New Folder: Create Default Location to create a new folder and have Move Items X place those files in it. The program can even name the new folder with the current date and time if you set up the preferences that way.

The one significant limitation of Move Items X is that it cannot move items between volumes—it can only copy or make aliases of the items. But if you've been looking for an OS X version of Windows' Send To menu for filing and organizing items, you'll like Move Items X.



Time Tracker Active Timer can tell you how much of your day you spend surfing the Web.

Unlike OS X's built-in functionality, which marks misspelled words but requires that you control- or right-click on each word to choose from among the suggested correct spellings, HyperSpell displays a list of spellings automatically for each word. You can use either the mouse or the keyboard to choose the preferred replacement word (or choose Learn Spelling to add the current spelling to OS X's dictionary, or Ignore Spelling to skip to the next misspelled word).



Spell Well HyperSpell gives you OS X's spelling checker anywhere you can type text.

Once you press the return key to indicate your choice, HyperSpell moves to the next misspelled word, and so on. (Pressing return without choosing an option also takes you to the next word.) I like HyperSpell's approach better than OS X's—HyperSpell requires less mousing around.

After you've completed your spelling check, just switch back to the application you were working in—by pressing the escape key or using any standard OS X method for switching between applications. HyperSpell copies the corrected text to the Clipboard for pasting back into the original document.

I do have a couple of minor beefs with HyperSpell. First, when it isn't finding any more misspellings, it beeps, which can be confusing—a beep from an application generally indicates an error. I think a better approach would be to display an alert. And when correcting a misspelled word, if you want to type the right spelling manually—perhaps the built-in dictionary doesn't include it—you have to first exit the word-suggestion menu by clicking within the text; you can't simply start typing. After typing your preferred spelling, you then have to press the return key to resume the spelling check.

Still, it's quite handy to be able to use OS X's own spelling-checker features whenever you want, no matter what application you're in. And because I like the fact that HyperSpell lets you perform your check and make corrections almost entirely from the keyboard, I've been using HyperSpell even in those applications that support OS X's built-in functionality.

SPELLING CHECKER

HyperSpell 1.3.1

In Mac OS 9, if you wanted to check spelling in something you were writing, you had to rely on the spelling checker in your text editor or word processor, or you had to purchase a third-party spelling checker. Commercial spelling checkers are still around, and OS X has pretty good spelling features built in. But you can't access these features unless the application you're using supports OS X's spelling checker. Many Apple apps—such as TextEdit, iChat, and Safari—do, but many applications from other companies don't.

If you're looking for a universal and inexpensive spelling checker, Kuwan .net's $10 HyperSpell 1.3.1 (★★★½; www.kuwan.net) is a good option. HyperSpell provides access to OS X's spelling checker from within any application—and I prefer its interface to that of OS X's standard checker.

To use HyperSpell, copy some text from any application to the Clipboard and then click on the HyperSpell icon in the menu bar (or press a user-defined keyboard shortcut). HyperSpell's window appears with your text automatically inserted, and the program begins its spelling review.

TIME-TRACKING TOOL

Active Timer 1.1

Have you ever wondered exactly how much time you spend working in an application on your computer? For example, how much do you use Safari in a given day? There are plenty of utilities designed to help freelancers keep track of their hours for each project, but I just want to know how much time I spend in Microsoft Word, NetNewsWire, Entourage, and Safari during the workday. Why? Because I'm the curious type (but if you're the practical type, you might use it to track your productivity).

Robert Chin's free Active Timer 1.1 (★★★½; osiris.laya.com) is just the sort of simple timekeeper I've been looking for. It keeps track of how many hours, minutes, and seconds you spend in each application (specifically, how much time each program is active). Whenever you launch a new application, Active Timer adds that app to its list and begins tallying its time.

Active Timer can also add up the time you spend in all applications or a subset of apps; select the apps you want to tally, and the Sum Of Times field shows the cumulative time. You can use the Start/Stop button to pause the timers when you're away from your desk or otherwise not using your computer. And if you do need to keep track of individual projects, you can stop and save the running tally, and then open it again later to continue tracking your time—for example, you could create multiple Active Timer documents, one for each project, and then switch between them when you shift from one project to another.

Active Timer isn't as full-featured as dedicated project-tracking utilities, but it can do the job in a pinch—and it's free. I suspect that most people will use Active

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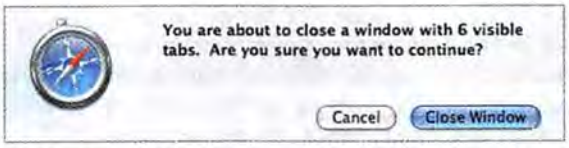
Timer just to satisfy that "What did I do all day?" curiosity.

SAFARI TAB UTILITY

Taboo 0.3

I love Safari's tabbed browsing feature—I can't use a browser without tabs. But I do have a couple of complaints about Safari's implementation of tabbed browsing, including one major gripe. Have you ever accidentally closed a Safari window with multiple tabs open when you really wanted to close just one of those tabs? Or have you ever accidentally quit Safari by pressing ⌘-Q when you meant to close the current tab by pressing ⌘-W? If you answered yes to either of those questions, you know how futile—and frustrating—it is to try to remember what each lost tab contained.

I'm surprised Safari lets you do this. Given the number of places in OS X where Apple has implemented "Are you sure?" dialog boxes to prevent users from losing data or making irreversible changes, not having one that prevents such forehead-slapping flubs in Safari seems like an oversight. But until Apple adds this option, there's Obsessive Compulsive Development's free Taboo 0.3 (♦♦♦½; www.ocdev.com).



Tab Saver With Taboo, you won't accidentally close a multitab Safari window again.

What Taboo does is really simple—it displays a warning when you try to close a Safari window containing multiple tabs or quit Safari with multiple tabs open. Never again will you lose a host of tabs just because you weren't paying attention. (If you're sure you want to close a multitab window, you can bypass the warning dialog box by holding down the shift key while clicking on the red close button.) Sure, some Web browsers, such as Mozilla's Firefox, have had this functionality built in for a while, but I like Safari better than Firefox, so I'd rather have the feature in Safari.

I do have one complaint about Taboo, and it relates to the software's installer. Because Taboo is a Smart InputManager Bundle Loader (SIMBL) plug-in, you should be able to install it either in the root-level Library folder (which makes it available to all users on your Mac) or in *your user folder*/Library (which restricts it to your own account). But the Taboo installer package doesn't give you a choice—it installs the software in the root Library folder. Why does this matter? For one thing, it's always safer to install software of this type—stuff that modifies the OS or applications—in individual user accounts rather than at the system level. That way, if the software ever causes problems, you can log in to a different, clean account to fix things. Also, sometimes new versions of Safari conflict with the SIMBL software. If you install an OS X or Safari update and it doesn't work with SIMBL, Safari won't work until you either remove SIMBL or download an updated version; you can't do the latter if you can't launch Safari in any account.

DISK CLONER

SuperDuper 1.5.5

When a major Mac OS release such as Tiger comes out, it brings up the peren-

continues

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Clone Home SuperDuper is the easiest way to clone your OS X volume—and maintain that all-important hard-drive backup.

nial topic of hard-drive backups—a vital part of any upgrade. But savvy users know you should always have a working backup of your Mac's hard drive, one that includes all the essentials.

One way to back up is to *clone*, or make a mirror image of, a drive. This approach lets you perform a clean installation of OS X and use Apple's Migration Assistant to restore your data and applications from the clone. And it has a bonus—if anything should ever happen to your main hard drive, you can be up and running from the clone in no time. Unfortunately, because of issues with invisible files and permissions, you can't simply drag the contents of one volume onto another to get a complete copy (as you could do in the days of OS 9).

In the past, my favorite utility for cloning my hard drive was Mike Bombich's Carbon Copy Cloner—but it's not yet fully compatible with Tiger, and some users find its interface a bit intimidating. Another option is OS X's Disk Utility, which can make copies of volumes, but its options are fairly limited. I've recently found a new favorite: Shirt Pocket's $20 SuperDuper 1.5.5 (★★★★½; www.shirt-pocket.com).

Like Carbon Copy Cloner, SuperDuper lets you make an exact duplicate of your hard drive; you can even boot your Mac from the resulting clone. But what I like most about SuperDuper is that it's easy to use for the most basic functions, and it offers advanced features not found in Carbon Copy Cloner.

For one thing, the interface explains in plain English what's going to happen, so you can be sure you're doing what you want to do. For example, to make a standard clone (a bootable copy) of a volume, you just choose the volume you want to copy and the volume on which you want to make the copy—SuperDuper tells you exactly what's going to happen. Click on the Start Copying button, provide your administrative-level user name and password, and let SuperDuper do the rest; you can watch its progress in the dialog box that appears. The resulting copy will be an exact clone of the original—if the original volume was bootable, the copy will be, too.

However, SuperDuper also provides a number of different ways to copy files and volumes, as well as several ways to customize the process. In addition to the standard method of cloning a volume, SuperDuper offers three other types of copies: Backup - User Files, which copies only those files found in the Users folder; Safety Clone - Shared Users And Applications, which copies all files from the source *except* user files and third-party applications; and Safety Clone - Shared Users, which copies everything except user files.

continues



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With Safety Clone, both volumes share user and, if chosen, application files. If you want to try out an OS X update, for example, you can safely install it on the Safety Clone drive or partition—your personal data and settings remain on the original volume. If all goes well, you can install the update on your original volume; if something goes wrong, all your settings and personal files remain intact.

SuperDuper also offers several options that you can select before, during, and after copying. For example, you can have SuperDuper repair permissions on the source volume before beginning a copy. Power users and administrators will appreciate SuperDuper's ability to create a disk image of the destination volume, install a package onto that volume, or even run a script that customizes the destination volume—great for deploying a standard image to many computers, as in a lab environment. You can also choose to reboot from the new clone after SuperDuper finishes.

For most users, the most important options are the During Copy choices. You can set SuperDuper to erase the destination volume and then copy files from the source to the destination (the standard method); to copy only files that are new or that have changed since you made the previous copy to an existing clone, as well as delete any files that no longer exist on the original volume; to copy only newer files from the original volume to the destination, but not delete files removed from the source volume; or to copy only changed files (this option copies different versions of files—whether they're older or newer—to the destination volume). As a nice touch, SuperDuper remembers your settings the next time you launch it, so you don't have to set it up each time.

Finally, the SuperDuper manual is comprehensive and understandable—something I always appreciate—and even includes a section on how to recover files from a backup should disaster strike. The only major feature missing is the ability to schedule copy or clone operations—for example, I'd like to be able to tell SuperDuper to clone my hard drive automatically every night at midnight. The good news is that Shirt Pocket has promised scheduling support in the next major update. □

Senior Writer DAN FRAKES (www.danfrakes.com) is also the reviews editor of Playlistmag.com. Send your thoughts on this column, or on things you'd like to see in future columns, to macgems@macworld.com.

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Macworld

Top Products

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DUAL-LAYER DVD BURNERS



d2 DVD± RW 16× FireWire, with Double Layer ($189), from LaCie (www.lacie.com):

This DVD burner can burn 8.5GB of data to dual-layer DVDs (which offer twice the capacity of single-layer discs). Although it has a relatively slow read speed, its performance is very good overall—it burns 2.4×-rated dual-layer media at 4×. Its excellent Mac compatibility includes support for OS X 10.4 (Tiger) and iLife (except for iDVD), and it comes with the full version of Roxio's Toast Titanium (April 2005; macworld.com/0313).

ALSO RECOMMENDED:



PX-716UF ($239), from Plextor (www.plextor.com):

This DVD burner is relatively expensive, but it's very fast and has FireWire 400 and USB 2.0 connections (April 2005; macworld.com/0313).

DIGITAL SLR CAMERA



EOS Digital Rebel XT ($899; with EF-S 18mm–55mm f3.5–f5.6 zoom lens, $999), from Canon (www.canon.com):

Canon defined the digital SLR market with the original Digital Rebel, and it keeps its lead with the Digital Rebel XT. If you're a fan of Canon's EOS 20D, then you'll like this less expensive model. Though the lack of control interlocks is an oversight, the camera's feature set, image quality, and price, combined with the vast assortment of Canon mount lenses, make the Canon EOS Digital Rebel XT the best choice in the sub-$1,000 digital SLR class (July 2005; macworld.com/0535).

For current Apple hardware prices, ratings, and test scores, see the chart on page 75.

FLATBED SCANNERS

MIDRANGE SCANNER



CanoScan 9950F ($400), from Canon (www.canon.com):

This CanoScan raises the bar for midrange scanners by offering high optical resolution, improved scan quality, and more-intuitive software controls. The 9950F tops its predecessor, the 9900F, in almost every way (macworld.com/0188).

LOW-END SCANNER



CanoScan 8400F ($150), from Canon (www.canon.com):

The 8400F has limited film and transparency support but is a great all-around scanner with some high-end features and a low-end price (macworld.com/0187).

COLOR LASER PRINTERS



LaserJet 2550Ln ($600), from Hewlett-Packard (www.hp.com):

This inexpensive, networkable printer offers crisp text and good color fidelity. It supports Apple's Bonjour (formerly Rendezvous). Its paper capacity is only 125 sheets, so you may want to buy the optional ($100) 150-sheet tray (macworld.com/0083).

ALSO RECOMMENDED:



Magicolor 2430 DL ($499), from Konica Minolta (www.konicaminolta.com):

With a low price, accurate color prints, and features such as PictBridge camera printing, this networkable printer could be good for your home or small office, as long as you don't need PostScript capabilities and don't have sensitive ears (macworld.com/0635).

NEW: FIREWIRE HARD DRIVES

DESKTOP DRIVES



NEW **External Hard Drive FireWire 800/FireWire 400/USB 2.0 250GB, Black Series** ($240), from Iomega (www.iomega.com):

Iomega's new desktop drive has it all—a full complement of ports with both flavors of FireWire, as well as USB 2.0. It has a low price per gigabyte and enough capacity for most users. It's also speedy, turning in the best result for one of the three timed tests we ran on each drive (macworld.com/0580).

ALSO RECOMMENDED:



NEW **400GB Mercury Elite-AL Pro 7,200 rpm FireWire 800/400+USB2** ($399), from OWC (www.macsales.com):

OWC recently added a new, less expensive line of aluminum-clad drives to its Mercury Elite Pro lineup. The AL series features the same high performance, ports, and drive options as *Macworld*'s previous Editors' Choice, but it has a lower price tag and a slim aluminum case that complements a Power Mac G5. The drive performed well, winning one of the three timed tests we ran and coming in near the front of the pack on the other two (macworld.com/0580).

PORTABLE DRIVES



100GB Mercury On-the-Go 5,400-rpm 8MB ($300), from OWC (www.macsales.com):

It's a little expensive compared with others in its class, but this bus-powered drive has everything: FireWire 400 and 800, USB 2.0, blazing speed, and the ability to start up and run OS X via FireWire (macworld.com/0314).

ALSO RECOMMENDED:



NEW **Mobile Hard Drive, Design by F.A. Porsche 60GB 7,200 rpm USB and FireWire** ($240), by LaCie (www.lacie.com):

The Mobile Hard Drive is a superfast FireWire 400 and USB 2.0 drive that beat some FireWire 800 drives in our speed tests. We like that the speed also comes at a competitive price (macworld.com/0314).

COLOR INK-JET PRINTERS



Photosmart 8450 ($250), from Hewlett-Packard (www.hp.com):

This networkable ink-jet printer uses eight inks to print excellent-looking photos (macworld.com/0280).

ALSO RECOMMENDED:

Stylus Photo R800 ($399), from Epson (www.epson.com); January 2005; macworld.com/0246

Pixma iP8500 ($350), from Canon (www.canon.com); February 2005; macworld.com/0275

MINIDV CAMCORDER



Optura 60 ($899), from Canon (www.canon.com):

The Optura 60 shoots excellent video (as long as you have enough light) with accurate, vibrant color. It also offers optical image stabilization, a true 16:9 widescreen mode, and extensive manual controls for creative flexibility. It snaps decent still images, too (macworld.com/0621).

LCD MONITORS

23-INCH DISPLAY



L2335 ($1,599), from Hewlett-Packard (www.hp.com):

Along with its outstanding value and ability to pivot to portrait mode, the HP L2335 also provides excellent video-in options and very good color fidelity and viewing angle (March 2005; macworld.com/0278).

20-INCH DISPLAY

MultiSync LCD2070NX ($799), from NEC Display Solutions (www.necdisplay.com):

The MultiSync LCD2070NX is great for people who want a moderately priced monitor that can display bright, accurate colors (macworld.com/0636).

19-INCH DISPLAY



SDM-HS95P ($699), from Sony (www.sony.com):

This display lacks some of the extra features found on other displays (such as a USB hub, speakers, or the ability to pivot), but the SDM-HS95P is a bright and shiny, nicely designed display that performs well. It's available in silver or black (macworld.com/0638).

17-INCH DISPLAY

SDM-HS75P ($450), from Sony (www.sony.com):

It's short on bells and whistles—no built-in USB support, speakers, or ability to pivot—but the SDM-HS75P is a good choice for people who have limited desk space and who want a bright and shiny, well-designed display. It comes in silver or black (macworld.com/0638).

DIGITAL CAMERAS

BUDGET CAMERA



Photosmart M22 ($150), from Hewlett-Packard (www.hp.com); macworld.com/0595

FOR DIGITAL PHOTO BEGINNERS



PowerShot SD400 ($399), from Canon (www.canon.com); macworld.com/0634

FOR INTERMEDIATE SHOOTERS



C-7070 Wide Zoom ($600), from Olympus (www.olympus.com); macworld.com/0577

FOR ADVANCED AMATEURS



Dimage Z5 ($649), from Konica Minolta (www.konicaminolta.com); July 2005; macworld.com/0534

Top Products are those we've recently reviewed in a comparison of like products. As new products become available, we will update the list. For longer reviews of these products and for other product recommendations, go to www.macworld.com/reviews.

IN THE MACWORLD LAB

Hardware Products We Tested This Month

COLOR INK-JET PRINTER



Photosmart 8750 ($500), from Hewlett-Packard (www.hp.com):

The Photosmart 8750 is a good large-format desktop photo printer and a good match for the advanced hobbyist who wants to make large prints at home. But slow print times, long drying times, and lack of individual ink tanks will have professional photographers looking elsewhere (macworld.com/0532).

DIGITAL CAMERA



Exilim EX-Z750 ($450), from Casio (www.casio.com):

Aside from a few convenience issues, the 7.2-megapixel Exilim EX-Z750 is a fun camera with many interesting, and some useful, features, such as in-camera editing, manual modes, and a large LCD that will appeal to budding digital photographers (macworld.com/0737).

COLOR LASER PRINTER



LaserJet 2600n ($399), from Hewlett-Packard (www.hp.com):

The LaserJet 2600n's price is hard to beat, but picky printer shoppers might want to spend a little more for a printer with better image quality (macworld.com/0738).

MINIDV CAMCORDER



DCR-PC55 ($800), from Sony (www.sony.com):

The Sony DCR-PC55 looks good, but its video quality is only average. Consider shelling out an additional $100 for the Canon Optura 60, which offers much more camcorder for the money (macworld.com/0739).

MINIDV CAMCORDER



DCR-HC42 ($600), from Sony (www.sony.com):

The Sony DCR-HC42 captures respectable video, but the fringing will annoy people who have discriminating eyes (macworld.com/0740).

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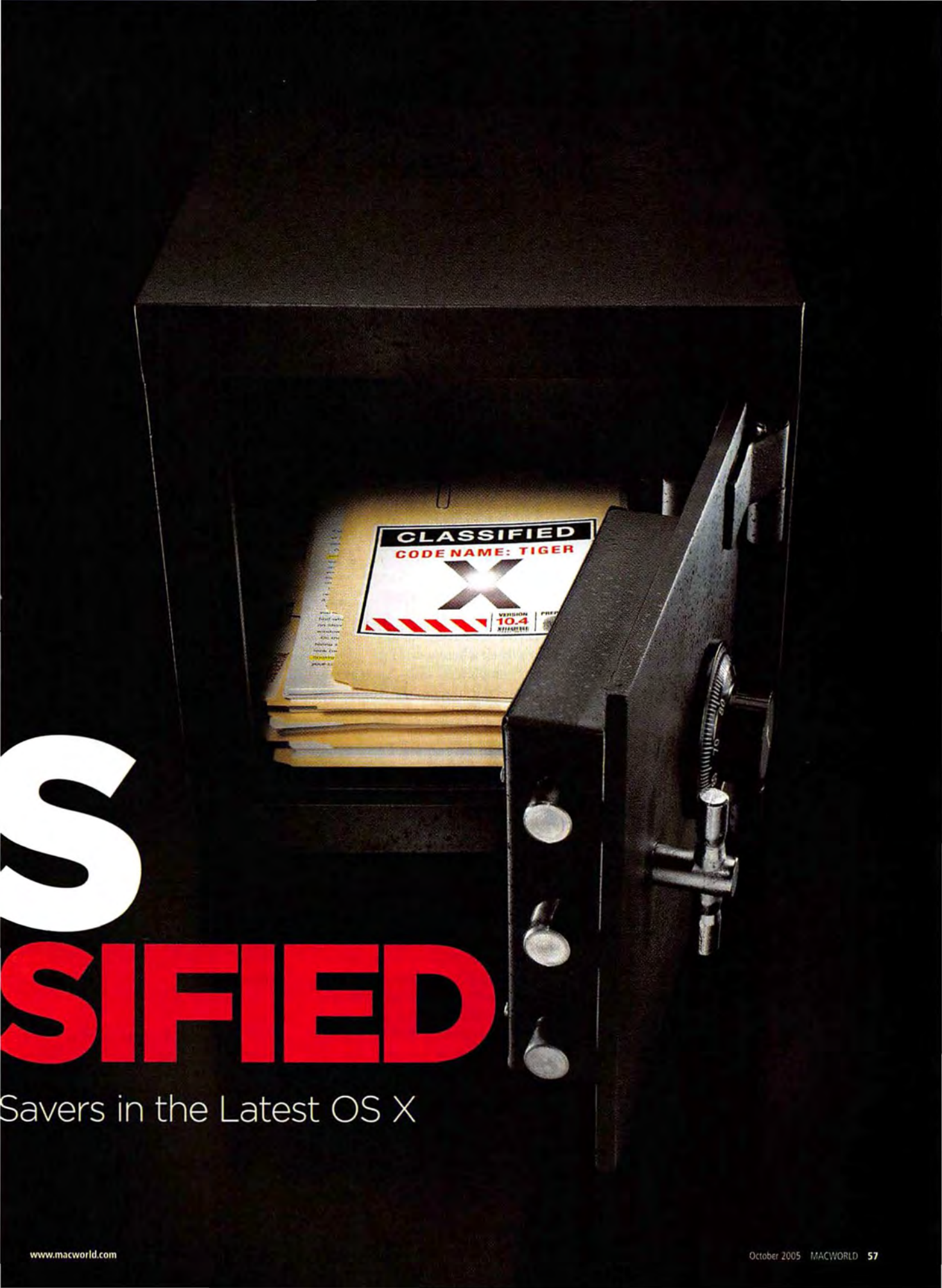
Secret shortcuts. Hidden helpers. Mysterious menus. You could spend months tracking down all the undocumented features tucked away in Mac OS X 10.4, Apple's newest operating system. But chances are, you're too busy *using* Tiger for more-important tasks—such as doing your job. So *Macworld* sent in a team of specially trained spies to uncover Tiger's deepest, darkest secrets.

From customizing your system settings to improving Spotlight's searching know-how, and from working around stubborn quirks to unlocking new Unix powers, our experts show you how to take advantage of Tiger's lesser-known features. Best of all, you won't even need your secret decoder ring.

TIGER SECRET DECLAS

PHOTOGRAPHY BY PETER BELANGER

55 Hidden Features, Slick Tricks, and Smart Time-



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Savers in the Latest OS X

CONFIDENTIAL

SYSTEM SETTINGS

20 Top-Secret Tweaks That Can Bend OS X 10.4 to Your Will

CUSTOMIZE TIGER'S PDF PRINT SERVICES

When you press ⌘-P to print in Tiger, you'll notice that the Print dialog box sports a new PDF disclosure triangle. Click on it, and you'll see a series of Automator workflows that you can apply when creating a PDF. The Compress PDF option, for example, slims your PDF file by compressing the graphics. However, you can easily modify the provided workflows—or create your own.

The provided workflows live in the /Library/PDF Services folder. Just double-click on one to open it in Automator. (You may want to duplicate the file first in case you decide to go back to the original version.) Make the changes you want. For example, you can modify the Compress PDF workflow so it moves the Quality slider to a more balanced position. Go to File: Save to save the modified workflow; the next time you print, you'll be able to access it from the PDF menu.

To build an entirely new workflow, create a PDF Services folder in your user folder's Library folder, use Automator to create the desired workflow, and then save it to the newly created folder. Your workflow will appear at the bottom of the PDF pop-up menu.—**ROB GRIFFITHS**



Foreign Affairs Tiger makes it easy to check your spelling in any language.

SILENCE ANNOYING SOUNDS

If you like having audio feedback when your Mac has completed a task—such as moving something into the Trash—open the Sound preference pane and enable the Play User Interface Sound Effects option. For the most part, these sounds are unobtrusive. But you may find that one really grates on your nerves. Although the Sound pane doesn't let you turn off specific sounds—it's all or nothing—there is a workaround.

In the Finder, navigate to /System/Library/Components. Control-click on CoreAudio.component and choose Show Package Contents from the contextual menu. In the resulting Finder window, navigate to /Contents/Resources/System Sounds. Within this folder are subfolders containing AIFF files of all the sounds your system makes, each clearly labeled.

Before deleting one of these files, back it up by dragging the sound file to another folder. Then highlight the sound file, drag it to the Trash, and provide your administrative password.

You may need to restart the Dock, the Finder, or the system itself to have the changes take effect. You can easily restart the Dock and Finder from Activity Monitor (in /Applications/Utilities).

If you're truly adventurous, you can replace the existing sounds with your own audio. Simply create an AIFF file, give it the same name as the file you're removing, and then drag your replacements into the proper folder. But make sure you have a backup of any sounds you're replacing—you may tire of hearing "D'oh!" every time you empty the Trash.—**RG**

MAKE TIGER BILINGUAL

Unlike previous versions of Mac OS, Tiger lets you apply language preferences to Apple's applications individually. For example, you can set Mail's Autocorrect Spelling feature to French (for your e-mail messages to distant relatives) while keeping the Finder in English.

READER FAVORITE

CONSULT THE DICTIONARY

One of my favorite little secrets in Tiger is the Dictionary/Thesaurus pop-up window that appears in applications such as Safari and Mail. Simply hover your cursor over any word and press ⌘-control-D to bring up a small window with the word's definition. If you keep the control and ⌘ keys pressed, you can then mouse over other words to see their dictionary or thesaurus entries as well. You can even highlight just part of a word (*embark* from *disembarkation*, for instance) to get the definition of a word within a word, or a part of a compound word (such as *science* from *science fiction*).

LLOYD VIENTE

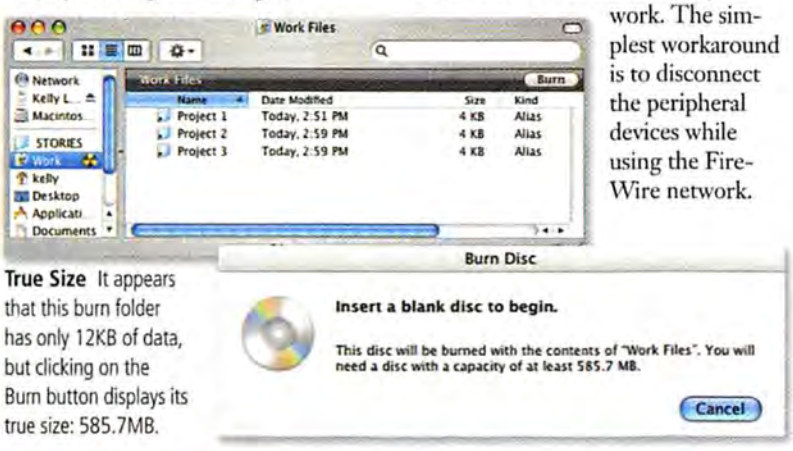
Here's how to set it up: Go to the International preference pane and click on the Input Menu tab. Select the language(s) you want to add—French, in this case—and enable the Allow A Different Input Source For Each Document option at the bottom of the window.

Move to Mail and create a new message. Enter the French text you want. When Mail places a red line under the foreign words to signal that they're not in the dictionary, simply control-click on the underline, choose Spelling from the contextual menu, and then choose Français from the Dictionary pop-up menu (see "Foreign Affairs").—CHRISTOPHER BREEN

VIEW SIZE REQUIREMENTS FOR BURN FOLDERS

Thanks to the Finder's new Burn Folder feature (File: New Burn Folder), burning files to a CD is easier than ever. Just drag the files you want to burn into a burn folder, insert your CD-R, and click on the Burn button. The Finder fills the burn folder with aliases, rather than the original files. So once the burn is complete, you can trash the burn folder without losing your work. Unfortunately, the Finder's size display for Burn Folders is incorrect—it shows the size of the alias files, not the originals. So how do you find out how much disc space your files will require?

The quickest way is to click on the Burn button before inserting any recordable media. The Finder will display a dialog box listing the amount of disc space the files require (see "True Size"). The other option is to select the burn folder in the Finder, press ⌘-I, and then click on the triangle next to the Burning section of the resulting dialog box. When you click on the Calculate button, the Content Size field will display the size of the files within the folder.—RG



True Size It appears that this burn folder has only 12KB of data, but clicking on the Burn button displays its true size: 585.7MB.

GET NETWORKED ON-THE-GO

Tiger makes it very easy to connect two Macs via a FireWire cable—you don't even have to use Target Disk Mode. On both computers, go to the Network preference pane, select Network Port Configurations from the Show pop-up menu, and enable the Built-in FireWire option. Next, go to the Sharing preference pane (again, on both computers) and click on the Start button to activate Personal File Sharing.

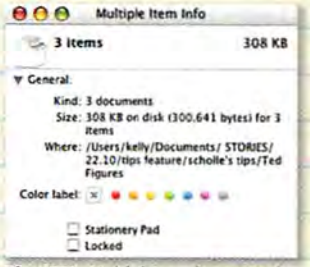
This is many times faster than using an Ethernet connection to transfer files. There's only one problem: if you're already using the FireWire port to connect peripheral FireWire devices, such as an iSight camera, either the peripheral devices or the network connection may not work. The simplest workaround is to disconnect the peripheral devices while using the FireWire network. (For more on setting up ad hoc networks, see "Ad Hoc Networking," *Mobile Mac*, page 88.)—TED LANDAU

READER FAVORITE

GET BETTER INFO

When you select multiple files in the Finder and go to File: Get Info, a new Info window opens for each file. However, if you hold down the control key and do the same thing, the Get Info option changes to Get Summary Info. Selecting this option displays a single Info window with a summary of all the selected files and their combined size. If you hold down the option key instead, the Get Info option changes to Show Inspector. This opens an Info window that operates just like the one in Mac OS X 10.1—the window stays on screen and updates to show the file information of any file or folder you click on.

ANDY BURSON



The 411 Hold down the control key when opening a new Info window for multiple selections, and you'll see a summary box.

SECURELY ERASE YOUR HARD DISK

Before you sell or give away a Mac, make sure that no personal data remains on it. After you've copied all your files to your new Mac, restart the old one from the Mac OS X installation disc. Open Disk Utility and select your disk from the list on the left. Click on the Erase tab and then on Security Options. Next, choose one of the several erasure methods that are offered. The 7-Pass Erase option is probably sufficient for most people, but if you're truly paranoid, select 35-Pass Erase, which will make it nearly impossible for anyone, even James Bond, to recover your files. If you're using a laptop, make sure it's plugged in. This process can take a long time.—KIRK McELHEARN

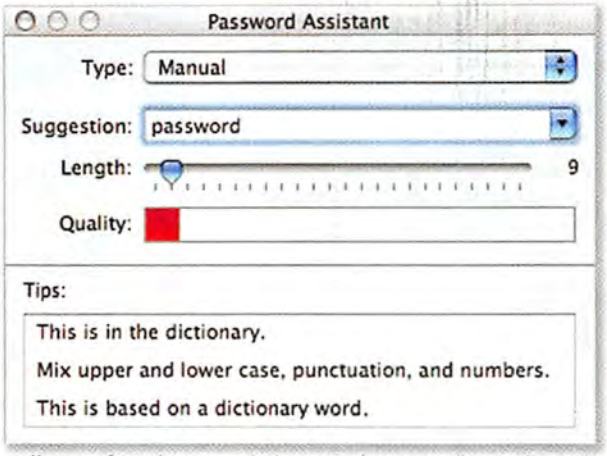
CREATE BETTER PASSWORDS

All of Tiger's security measures are for naught if any passerby can figure out your passwords. To see how

yours hold up, run them through Tiger's new Password Assistant (see "Bulletproof?").

You can access Password Assistant from the Keychain Access utility (/Applications/Utilities) or from the Accounts preference pane. In either, you click on the plus sign (+), enter your password, and then click on the key icon. (If you want to test a password but don't need a new user account or a Keychain item, just click on Cancel when you're finished.)

Password Assistant can also create passwords for you. Click on the Type menu to choose the kind of password you'd like to create: the Memorable option creates odd phrases such as *emits40\dais*, Letters & Numbers and Numbers Only passwords are much harder to remember, and a Random or an FIPS-181 Compliant password should meet the needs of highly security-conscious users.—KM



Bulletproof? Only passwords that are truly secure will make the grade in Tiger's Password Assistant.

SLOW QUICKTIME MOVIES

Don't want to miss a second of the latest iPod ad (or any other QuickTime content)? Watch it in superslow motion. Once the clip starts playing (you can find one at macworld.com/0582), you can simply press the right-arrow key to move through the movie frame by frame. If you hold the key down, the movie moves at normal speed without sound. The left-arrow key does the same thing, but in reverse (QuickTime seems to have more trouble playing backward than playing forward, so the results are somewhat jerky).

You can get even more control over playback by using a scroll-



DASHBOARD CONFIDENTIAL

Dashboard—the Tiger feature that added the term *widget* to every Mac user's vocabulary—gives you quick access to handy utilities such as traffic trackers, Stickies, and more. But if you're not careful, dealing with all your widgets can become an unmanageable task. These tips should put you back in charge.

SEE DASHBOARD IN A FLASH

Dashboard usually runs in a toggle mode: you press F12 to activate Dashboard so you can use the widgets, and then you press F12 to exit it. But if you want only to view widgets, instead of interacting with them, you can use Dashboard in a temporary mode. Instead of pressing and releasing F12, hold it down. Dashboard will remain visible for as long as you hold down the key, letting you view any already-open widgets. When you release F12, Dashboard will vanish.

Note that if you're using a keyboard that lacks a dedicated eject key, you'll have to use the Dashboard & Exposé preference pane to remap Dashboard's default activation key to something else—otherwise, holding down F12 will cause your CD or DVD drive to open.—RG

SEE DASHBOARD WIDGETS WITHOUT CLICKING

Tired of having to mouse over and click on the big plus sign (+) to bring up the Dashboard bar? Here's a little-known (and undocumented) keyboard shortcut: after activating Dashboard (the default shortcut on most computers is F12), just press ⌘–equal sign (=) to bring up the Widget bar. Press the combo again to make the bar vanish. Unfortunately, you can't activate the widgets without resorting to the mouse.—RG

WHIP WIDGETS INTO SHAPE

Having problems getting a widget to work? Often, all you need to do is reload it. To do so, click on the widget and press ⌘-R.—TL

FIND MISSING WIDGETS

Ever put a new widget in your Widgets folder but then fail to see it on the Widget bar? Scroll past where it should be on the bar (widgets appear in alphabetical order) and then back again. You should now see it where it belongs.—DORI SMITH

PLACE A WIDGET IN THE FINDER

If you'd rather see a widget all the time—not just when you switch to Dashboard—you can move the widget to Tiger's Finder layer, so it appears on the desktop. Launch Terminal (/Applications/Utilities); then type `defaults write com.apple.dashboard devmode YES`. Log out and then log back in, and you'll be able to pull as many widgets into the Finder layer as you like. While dragging the widget from the Widget bar, press F12 to close Dashboard. When you release the mouse, the widget will appear on the desktop.—DS

wheel mouse. Make sure your cursor is somewhere within the movie frame, and then simply move the mouse wheel up while the movie is playing to control the playback speed and direction.—RG

RETURN THE TOOLBAR TO SYSTEM PREFERENCES

Tiger's updated System Preferences has a nice new feature—the integration of Spotlight searching, which displays results as you type. However, it's also missing one very useful feature—the customizable toolbar where you could store frequently used preference panes for quick access. If you prefer the old way, there is a relatively simple solution: use the previous version of System Preferences. If you used the Archive & Install option to install Tiger, you'll find the previous System Preferences application in your /Previous System/Applications folder. Give it a new name (for example, Old System Prefs) to avoid overwriting the new version, and then copy it to your root Applications folder. When you launch System Preferences, you'll see what looks a lot like the new version, but you'll have the toolbar to work with. However, you'll no longer see the integrated Spotlight search box. Also, the Spotlight panel will be in the Other section. Apart from these changes, the application is fully functional—and you'll have the toolbar again.—RG

ACCESS INVISIBLE LOGIN BUTTONS

Tired of the smallest members of your household messing with your Mac? If you have little kids who love to click on buttons, consider disabling the login window's Restart, Sleep, and Shut Down options. To do so, go to the Accounts preference pane, select the account, and click on Login Options. (You might need to click on the lock at the bottom of the dialog box first and enter your password.) Deselect the Show The Restart, Sleep, And Shut Down Buttons option. Without any buttons to click on, children will quickly grow bored and leave your machine alone.

But what if you want to put your machine to sleep, restart it, or shut it down from the login window after you've disabled the buttons? No problem. First, make sure your login window is in Name And Password mode. You can set this permanently in the Login Options window (by selecting the Name and Password option). Or you can use a little trick to switch the window in real time: Go to the login window, use the arrow keys to highlight a user, and press shift-option-return. The window will show the list of users. In the Name field, type `>sleep`, `>restart`, or `>shutdown` (see "Invisible Sleep Button"). Click on Log In or just press return. It'll take a while before the munchkins figure that one out!—RG



Invisible Sleep Button You can hide your Sleep, Restart, and Shut Down buttons from the exploring fingers of your children. Then accessing these options just takes a bit of typing, as shown here.

FLY BETWEEN AIRPORT NETWORKS

Suppose you need to regularly connect to two different wireless networks—at work and at home, for example. Of course, each one uses a different network setup, such as DHCP in one case and a manual IP address in the other. Before Tiger, that meant you had to set up a separate network location for each and switch between them. Now you can create multiple AirPort configurations for the same network location. This allows for seamless switching without having to select a different location each time, saving some hassle and mouse-clicking. Simply open the Network preference pane and select Network Port Configurations from the Show pop-up menu. Then click on the New button and select AirPort from the Port pop-up menu.—TL

GIVE DIFFERENT HARD DISKS DIFFERENT BEDTIMES

To conserve energy, you can set your hard disks to *sleep* when you're not using them. Just choose the Put The Hard Disk(s) To Sleep option in the Energy Saver preference pane. If you have multiple disks, however, there's no obvious way to set separate sleep times for each—this can be annoying since there's a delay when you wake a disk up. You can gain more control over your hard disks' sleeping patterns by using the Developer (Xcode) tools that came on your Tiger installation CD.

Install the tools from the CD. Then go to the /Developer/Applications/Performance Tools folder and open the Spindown HD application. From here, you can select a separate time for each mounted drive.—TL

HIDE YOUR MAC FROM HACKERS

If you use an always-on Internet connection, make sure to check out Tiger's new hacker-fighting tools. Go to the Sharing preference pane and click on the Firewall tab to see the new Advanced button. Click on it to access options such as Stealth Mode. With Stealth Mode enabled, uninvited queries to your computer will receive no acknowledgement, making it nearly impossible for someone to surreptitiously discover (and possibly hack into) your Mac.—TL

SPOTLIGHT

7 Secret Strategies for Sleuthing Lost Files

REVEAL THE FILE PATH IN SPOTLIGHT

When you click on a search result in the Spotlight menu, the file opens in its default application. But what if you just want to see where a file is hiding, without actually opening it? Simply hover your mouse over a selection in the Spotlight menu, and a small box showing the file path will appear. To jump to the file in the Finder, select it in the Spotlight menu and press ⌘-return. Note that this shortcut works only in the Spotlight menu; if you have the Spotlight window open, control-click on the entry and select Reveal In Finder from the menu that appears.—KM

EASILY CREATE ADDITIONAL SMART FOLDERS

Tiger lets you save a Spotlight search query as a smart folder, which dynamically updates to include any files that match the search criteria. For example, you can create a smart folder that contains all the images you've opened in the past week (from the Finder, go to File: New Smart Folder, and set the first row of menus to Kind: Images and the second row to Last Opened: This Week; then click on the Save button).

If you later decide that you'd like another search that further restricts the results to only large images—those larger than 2MB, for example—use this shortcut: Rather than creating another smart folder from scratch, just open the already-created smart folder and click on the Edit button. Add your new search criterion (Size: Greater Than: 2MB), and then press and hold the option key—the Save button will change to Save As. You can then give your modified smart folder a new name so it won't overwrite the original one.—RG

FIND SMART FOLDERS IN A FLASH

Once you've created a bunch of smart folders, give them a special Spotlight comment so you can access them quickly from the Spotlight menu. In the Finder, control-click on the smart folder and choose Get Info from the contextual menu. In the resulting Info window, click on the arrow next to Spotlight Comments to reveal the blank Spotlight Comments field (see "Get Smart"). Add your custom keywords here. I entered `SMSC`, which stands for *smart search*. (You'll get the most-accurate results if you choose keywords that aren't associated with other files.)



Get Smart For quick access to your multitude of smart folders, add a searchable Spotlight comment to each smart folder on your system. Just make sure you choose an obscure comment.

The next time you want to quickly find that smart folder, press ⌘-spacebar to display the Spotlight menu, and then type your keyword. If the comment is unique, only your smart folders will show up in the search results. Double-click to open one directly from the Spotlight menu. (Want to add your keyword to many files at once? See "Easily Add Spotlight Comments.")—KM

REVERT TO THE PREVIOUS FIND WINDOW

Do you dislike Tiger's default Find window? You want to search for a file name, so you press ⌘-F, only to be faced with the Kind: Any and Last Opened: Any Date search fields, forcing you to manually add the Name: Contains setting. If you

SPOTLIGHT TIME-SAVERS

Use these keyboard shortcuts to quickly navigate to and around the Spotlight menu.

⌘-spacebar	Opens the Spotlight menu.
⌘-option-spacebar	Opens the Spotlight window.
⌘-return	Opens the Top Hit item.
arrow keys	Move up and down the list of results.
return	Opens the selected search result.
⌘-click	Opens the file in a new Finder window.

miss the old way of doing things, here's how to turn back the clock.

First, create a new smart folder. Delete the second search setting (Last Opened: Any Date) by clicking on the minus sign (–) to its right. Then use the pull-down menus to change the Kind: Any setting to Name: Contains. In the file-name box, type something short that you know won't appear elsewhere—for example, use three vertical bars (|||).While you're at it, set the window's size and position. When you're done, click on the Save button, name the smart folder whatever you like (you'll rename it later), and save it to your desktop. Switch to the Finder and navigate to /System/Library/CoreServices. Control-click on the Finder entry, and select Show Package Contents. In the new window that appears, go to /Contents/Resources. Drag the file named default_smart.plist to your Documents folder, or to any location *other than* your desktop. This will serve as your backup file, in case you need to restore the original file later. Leaving the Resources window open, press ⌘-N to open a new Finder window, navigate to your desktop, and rename the new smart folder default_smart .plist. Click on the Use .plist option when the Finder asks whether you're sure you want to make this change.

Finally, drag your new default_smart.plist folder into the Resources folder. The Finder will ask for your admin password and will ask you to confirm that you want to overwrite the existing file. Once you've replaced the file, close the window.

To see your changes in action, restart the Finder. The easiest way to do this is to option-click on the Finder icon in the Dock and choose Relauch from the pop-up menu. Now when you press ⌘-F, you should see your newly customized Find window in all its glory; you'll just have to replace the file-name field with the search text.—RG

AVOID SPOTLIGHT'S BLIND SPOT

Having trouble finding that sourdough-bread recipe that you downloaded from the Web or the Read-Me file that came with the program you just installed? Whether you download plain-text files or work with them in a text editor such as Bare Bones' BBEdit or Apple's TextEdit, you may have discovered one of Spotlight's little quirks: it indexes plain-text files only if they include the *.txt* extension (which may be hidden). To ensure that your plain-text files don't get overlooked, make sure to save them with the *.txt* extension—just add it to the end of the file name. Conversely, if you *don't* want your text files indexed—to save disk space, for example—omit the extension.—KM

MAKE TEXTEDIT DOCS SPOTLIGHT-FRIENDLY

Some programs, including Microsoft Word and Excel, embed handy information (or *metadata*) in files; this information aids Spotlight in its searches. For instance, Word and Excel automatically include the name of a file's creator (as its author), and they guess at the document's title. This information lets you search for files by creator, or by a title that isn't part of the file name.

If you use TextEdit to create rich-text (RTF) documents, you can do the same. In TextEdit, select File: Show Properties, and enter an author, company, copyright, title, subject, keyword, or comment in the Document Properties window. If that sounds tedious, you can also define default Author, Company, and Copyright settings, which TextEdit will automatically apply to *all* your files. Select TextEdit: Preferences, and then enter the appropriate information.—KM

AUTOMATE IT

EASILY ADD SPOTLIGHT COMMENTS

If you're having trouble finding the files you need, you can add helpful keywords to make searching easier. Just select the file, press ⌘-I, and enter the appropriate text in the Spotlight Comments field. For example, you could enter `Budget06` for any files pertaining to your 2006 budget.

However, adding Spotlight comments to several dozen files, one at a time, can be extremely tedious. Thankfully, there's Automator. With just a few clicks, you can create an Automator application that adds identical Spotlight comments to a group of files.

In a new Automator window, select Spotlight in the Library column and drag the Add Spotlight Comments To Finder Items action to the empty Workflow pane on the right side. Click on the disclosure triangle next to Options and enable Show Action When Run. To save the workflow, select File: Save As. From the File Format menu, select Application. Give the workflow an appropriate name and save it to the desktop. To put your new Automator workflow to work, simply drag a file or group of files onto its icon. A dialog box will appear with space for your comments. Now you can add a comment to dozens of files at once.—KM



Comments in Bulk Adding Spotlight comments doesn't have to be a tedious affair. This Automator workflow lets you apply the same keywords to many files at once.

PREVIEW

7 Undercover Uses for Tiger's Viewing Application



VIEW A FOLDER'S IMAGES

In previous versions of OS X, if you wanted to look at all the images in a folder, you had to open the folder, select all the images, and then drag and drop them onto Preview's icon in the Finder or the Dock. In Tiger, a subtle change has made this process much easier. You can drag and drop a folder onto Preview's icon—just hold down ⌘-option while you drag (this command forces any program to try to open anything you drop on it). You can drop the folder onto *any* Preview icon, whether it's in the Dock, the Finder's toolbar or sidebar, or even the Finder itself.

When you drop the folder, Preview opens a new window containing all the images inside it—the drawer displays a thumbnail for each one. Each PDF file, however, opens in its own window.

This new feature also lets you do something else quite cool—quickly find all the interesting images that are sometimes hidden within an application. An application is nothing more than a special type of folder. Just hold down ⌘-option and drop an application (TextEdit, for example) onto Preview's icon. Preview displays any images it finds in a new Preview window. Just be careful about trying this with large applications such as DVD Studio Pro. The process of collecting all the images can take a very long time. If you run into trouble, click on the Cancel button in the dialog box to stop the process.—RG

ADD KEYWORDS TO FILES

While you're sorting through folders of images or PDFs, why not also add keywords to them so they're easier to find with Spotlight later? Preview makes this easy. Drag the images or PDF files you'd like to tag into Preview and then select Tools: Get Info (or just press ⌘-I). In the Document Info window, click on the Keywords tab. Click on Add and then enter the keyword you'd like to use. If you have a group of files open, you can then simply click on the next image or PDF in the drawer. The window will change to reflect the selected file's information. When you're done, save the files. The next time you perform a Spotlight search, you'll be able to use the keywords to home in on your target.—RG



A Different View Preview usually sorts the photos in its drawer alphabetically. But by choosing a different criterion from the contextual menu, you can change the sort order—here, images are sorted by file size—and display additional information about the files.

CHANGE PREVIEW'S SORT ORDER

If you have multiple images open in a Preview window, you can now quickly change the order of the drawer's thumbnails—and get additional information about the images—by control-clicking in the drawer. From the menu that appears, select Name, Path, Date, Size, Kind, or Keyword. When you do, the images' sort order changes based on the selected criterion (if you choose Size, for example, the smallest files will appear at the top) *and* you'll see the information corresponding to your selection (see "A Different View").—KM

FIX PICTURES QUICKLY

No time to fiddle around with iPhoto or Adobe Photoshop? Use Preview as a quick-and-dirty image-correction tool. Open a graphic and select Tools: Image Correction. You'll see various adjustment sliders—Exposure, Gamma, Saturation, Contrast, Brightness, and Sharpness (see "Hey, That's Not Photoshop!"). You can even apply a sepia tone to the image and set a white point and black point, which calibrate your picture according to the absolute white and black parts of the image. When you've made the changes you want, save the file. If you want to go back to the original, select File: Revert.—KM

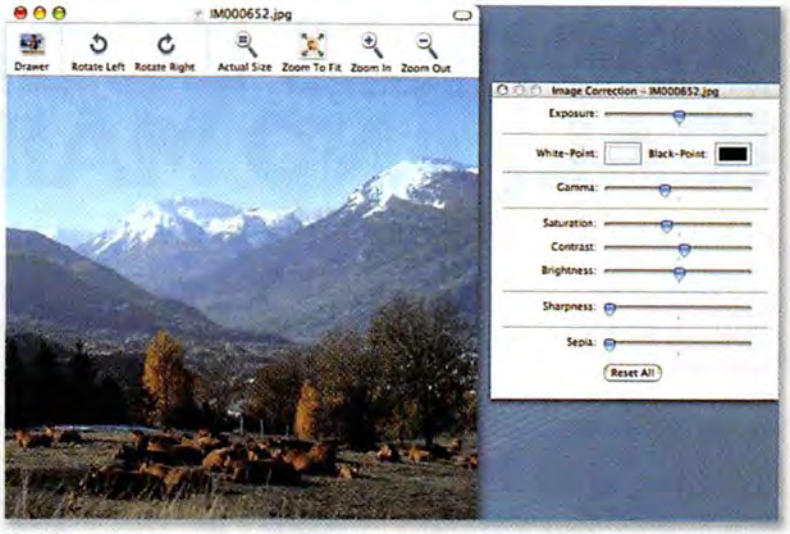
A NEW WAY TO GRAB SCREENSHOTS

Sure, you can press ⌘-shift-3 or ⌘-shift-4 to take a picture of your

screen, or you can use Apple's Grab utility (/Applications/Utilities). But now Preview includes its own screen-capture commands. In Preview, go to File: Grab. The options here are similar to the ones found in Grab. The difference is that after you make a capture in Preview, the new image immediately opens in Preview.—TL

ELIMINATE PREVIEW'S SLIDE-SHOW CONTROLLER

The Preview application in Tiger has some nice features that its predecessors lack, including the ability to display multipage PDFs and groups of images in a slide show. Just press ⌘-shift-F—when you do, you get an on-screen slide-show controller. But if the controller is covering some of the PDF's or image's contents—or if you just find it distracting—you can get rid of it. While in Slideshow mode, click on the second icon from the right to make your PDF fill the screen. To remove the toolbar, just click outside it—the toolbar will come back if you move the cursor over the image, so you may want to click beyond the image's boundaries. Once you've hidden the controller, you can use the left- and right-arrow keys to move backward and forward through the PDF.—RG



Hey, That's Not Photoshop! Try Preview's image-correction tools when you need to make a quick graphics fix.

AUTOMATE IT

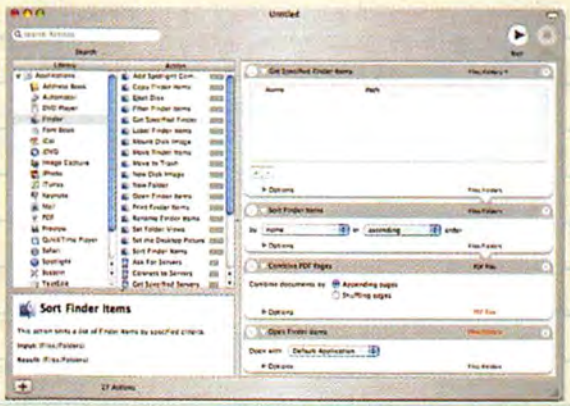
COMBINE MULTIPLE PDFS

Say you have a series of PDFs of various recipes, organized by type. Each is a separate file, but you'd like to combine them into one PDF. Prior to 10.4, you could use a third-party tool or a Unix program to get the job done. With 10.4, you just need Automator.

In Automator's Library column, click on Finder, and then drag Get Specified Finder Items from the Action column into the Workflow area on the right of the Automator window. Next, drag the Sort Finder Items action into the Workflow area, below the already-placed action. If you don't want to sort by name, click on the pop-up menus to choose another criterion and sort order. Click on PDF in the Library column, and then drag Combine PDF Pages from the Action column and place it at the bottom of the Workflow area. Select the Finder in the Library column again, and drag the Open Finder Items from the Action column to the bottom of the Workflow area. When you're done, you should have four actions (see "All Together Now").

To turn this Automator action into something you can use directly from the Finder, choose File: Save As Plug-In. In the window that appears, give your action a meaningful name (Combine PDFs, for instance). Leave the Plug-in For pop-up menu set to Finder, and click on Save.

To put it to use, quit Automator and switch to the Finder. Select each of your PDFs, using the shift and/or ⌘ keys as necessary to select them all, and then control-click on one of the selected files. Choose Automator: Combine PDFs (or whatever you called it) from the pop-up menu; then just sit back and wait a bit. Depending on the size of the PDFs, and how many PDFs you chose, the process will take from a few seconds to a few minutes. But when it's done, Preview will open one document containing every PDF you selected. Select File: Save to save it to the location of your choice. Note that this works best for PDFs with identical or very similar page layouts. For instance, you won't get good results if you combine landscape- and portrait-mode PDFs.—RG



All Together Now This workflow combines multiple PDF files (selected in the Finder) into one new file.

ADDRESS BOOK, iCAL, AND MAIL

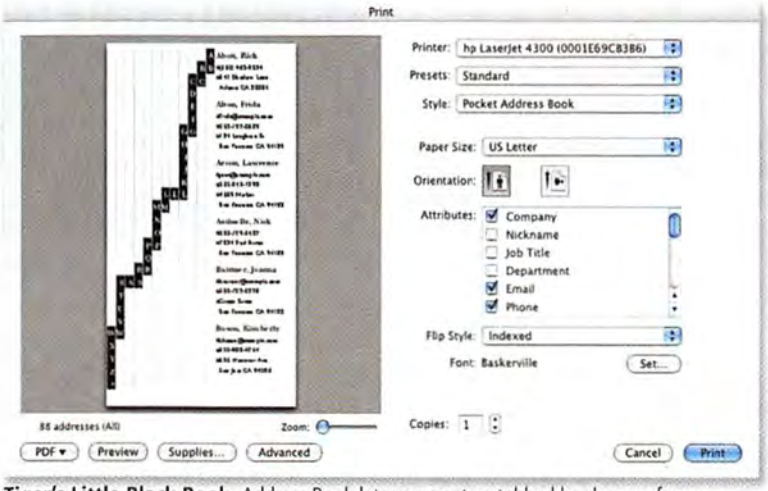
8 Covert Communication Strategies

ORGANIZE ADDRESS BOOK ENTRIES USING SMART GROUPS

Here's a simple but useful tip—you can use Address Book's Smart Groups feature to organize your Address Book entries.

Want a group that includes all your friends in Colorado? Select File: New Smart Group, give the group a name, choose State from the first pop-up menu, choose Is from the second, and type `CO` into the next field. Click on OK to create the group.

By adding multiple conditions, you can impart a high degree of organization to your Address Book. Just click on the plus sign (+) to add more conditions, and you can group contacts by, for example, state and city, or company and zip code.—RG



Tiger's Little Black Book Address Book lets you create a tabbed hard copy of your electronic contacts, for times when you can't get to your computer.

AUTOCOMPLETE ADDRESS BOOK SMART GROUPS IN MAIL

Once you've used Address Book's Smart Groups feature to build a dynamic list of related contacts—for example, everyone on your daughter's soccer team—you might find it useful to be able to send an e-mail to everyone in that smart group.

But while Mail makes it easy to send an e-mail to a traditional Address Book group—just enter the name of the group, and Mail populates the To field with any e-mail addresses in that group—the program doesn't know how to do this with smart groups. Here's a simple workaround:

Create your smart group in Address Book. When you're done, create a standard group; then drag and make sure Plug-In For is set to Finder. Then click on Save.

Go back to the Finder, select a file (or files), control-click on the selection, and then choose Automator: Mail This File from the pop-up menu that appears. Mail will open a new blank message with the selected Finder file attached.—RG

AUTOMATE IT

MAIL FILES QUICKLY

If you need to e-mail a file to someone, you can drag and drop the file onto Mail's Dock icon to open a new message with the file attached. But what if Mail isn't in your Dock? Or what if you don't feel like dragging a file all the way across your screen? Wouldn't it be easier to just control-click on the file and have the job done for you? All you need is Automator, OS X's easy-to-use automation tool.

Launch the program (in /Applications) and then click on Finder in the Library column. Drag the Get Selected Finder Items action from the Actions column into the Workflow area on the right side of the screen. Next, click on Mail in the Library column, and drag the New Mail Message action into the Workflow area, below the Finder action you already placed there. Select File: Save As Plug-In, give your new action a name (Mail This File, for example),



Express Mail This Automator plug-in lets you attach files to a Mail message with a single click.

and drop the smart group into the standard group. Back in Mail, use the name of that standard group when addressing e-mails. Mail will automatically fill in the e-mail addresses of the contacts in your Smart Group. (When you do this, use the BCC field so you don't send a huge list of e-mail addresses to all the contacts.)—RG

READER FAVORITE

RESIZE FILES VIA MAIL

If you drag a large photo into an open Compose window in Mail, an Image Size pop-up menu appears in the bottom right corner of the window, offering options for resizing all the photos in that window. Of course, you can do this directly from iPhoto, but if you find iPhoto too slow to use (I prefer Rune Lindman Development's QPict [$35; www.qpict.net]), this trick can come in handy.
RUBE REDFIELD

PRINT YOUR ADDRESS BOOK

Want a printed copy of your Address Book—maybe to keep in the car for emergencies? In Tiger, Address Book offers four printing templates for outputting contact details to paper: Envelopes; Labels; Lists; and Pocket Address Book, which produces a small tab-style address booklet. Go to Print and choose Pocket Address Book from the Style menu. Set the Paper Size setting to US Letter and choose the contact attributes—Company, E-mail, Address, and so on—you'd like to include for each contact (see "Tiger's Little Black Book").

To conserve paper, Tiger prints several Address Book pages on one sheet, with cutting guides. Cut out the pages and staple them together, and you'll have a handy paper backup of your electronic address book.—KELLY LUNSFORD

REMEMBER BIRTHDAYS

You can now choose to have birthdays that you've recorded in Address Book appear in iCal. To create a birthday entry in Address Book, select Address Book: Preferences, click on the Template tab, and choose Birthday from the Add Field pop-up menu. After closing the Preferences window, add the birthdays of your nearest and dearest. Now launch iCal, select iCal: Preferences, click on the General tab, and enable the Show Birthdays Calendar option. iCal will display a new Birthdays calendar.

Regrettably, the Birthdays calendar isn't a standard calendar file—it doesn't support alarms. There's a way around this shortcoming, however. Nip on over to www.versiontracker.com and download iCal-Alarmist, a €3 (about $4 at press time) utility from Knowledge Logistics that allows you to assign global or individual alarms to iCal calendar events (see "Birthday Wishes"). To use it for this task, simply select the Birthdays calendar and choose File: Export. In the resulting dialog box, save the calendar to the desktop and click on the Export button. Choose File: Import. From the resulting menu, choose the Birthdays calendar you just exported. With all your birthdays tucked neatly into this new calendar, you can use iCal-Alarmist to create an alarm for the events it contains. The folks at Knowledge Logistics tell me they're working on a more elegant solution that may be available by the time you read this.—CB



Birthday Wishes If you'd like more warning of iCal birthday events, try iCal-Alarmist.

EASILY EDIT SMART MAILBOXES IN MAIL

Like Address Book (with its smart groups) and the Finder (with its smart folders), the new version of Mail lets you create smart mailboxes, which update themselves based on rules you define. For example, you can create a smart mailbox containing only messages that you received in the last week and that had attachments.

If you need to edit a smart mailbox that you've already set up, just double-click directly on the smart folder's icon; you'll jump to edit mode.—RG

BACK UP WITHOUT BREAKING A SWEAT

It's always good to have a backup of your entire drive, or at least your entire Home directory, in case trouble strikes. But there are certain files that you may want to back up more frequently, such as your Address Book or iCal databases. Tiger makes doing this especially easy. To save a backup of your Address Book contacts, open the application and select File: Back Up Address Book. To make a backup of your iCal data, open the application and select File: Back Up Database. If you have a .Mac account, check out the new Sync tab in the .Mac preference pane for even more quick backup options (such as saving your bookmarks, contacts, calendars and Mail messages *hourly*).—TL



TROUBLESHOOTING

8 Sly Solutions to Tiger's Most Annoying Problems

ASSIGN STUBBORN MAIL SIGNATURES

Mail users who upgrade to Tiger may notice that the new version of Mail has trouble applying existing signatures to Mail accounts. To fix the problem, go to Mail: Preferences, click on the Signatures tab, and drag the signatures you want from the All Signatures list to each of your accounts (see "Your Signature Here"). The signatures should now appear in the Signature pop-up menu in each e-mail message you create.—CB



Your Signature Here If Mail seems blind to your signatures, try reassigning them from the Signatures preference pane.

SWITCH TO SAFE LAUNCH

The Quit Unexpectedly dialog box gives you the option of reopening an application that has just crashed. But if the application quits on you a second time, Tiger now gives you a new option: Try Again. When you click on this option, Tiger opens the program in Safe Launch mode, which prevents the application from accessing its preferences file. Corrupted preferences files are a common cause of application crashes.

If the Safe Launch mode is successful, you'll have to make a decision. When you quit the application, Tiger will ask whether you want to preserve the new settings. In most cases, you'll want to click on Yes. When you do, Tiger renames the original (presumably corrupt) preferences file by adding a *.saved* extension to its name. The application ignores the old file on future launches. However, this means that you'll have to re-create any changes made to the old preferences file.—TL

SOLVE UPGRADE ERRORS

When you upgrade to Tiger, the installation may fail, yielding an error message. The likeliest culprit here is incompatible third-party RAM. To check for this, remove any third-party RAM (making sure that you still have at least 256MB of RAM in your Mac) and try again.—TL

POLISH OFF PRINTER ERRORS

If you try to add a new printer via Printer Setup Utility, and you get the error "server error service unavailable," go to Printer Setup Utility: Reset Printing System. This will delete all printer queues and jobs, reset all printer settings to their default by deleting configuration files, and perform a permissions check on the /tmp directory. The error should go away.—TL

BATTLE BACKUP CRASHES

If you're a .Mac subscriber using Backup to save your data to your iDisk or CDs, you may be irked by crashes. And worse, when Backup crashes twice in a row and you use the Reopen/Retry button to relaunch it, sometimes Backup reverts to its Trial User mode. To fix this, just quit Backup. If an alert message asks whether you want to save new settings, click on No. The next time you launch Backup, your old settings should be restored.—TL

STOP ADDRESS BOOK CRASHES

If you try to print envelopes from Address Book and the printing fails or Address Book crashes, then open your own address entry and make sure you've entered an address for yourself. The envelope option needs that entry for the return address.—TL

CONNECT TO AN OLD MAC

Try to connect to an older Mac to send or get some files via file sharing, and you'll get a "Connection failed" error because Tiger supports sharing only via a TCP/IP connection. But there's a workaround. You can still connect *from* the AppleTalk-only Mac to the newer one running Tiger.—TL

GET BACK PREFERRED NETWORKS

When you open the Network preference pane, select AirPort from the Show pop-up menu, and then click on the Join pop-up menu, you should see two options: Automatic and Preferred Networks. The latter option, new in Tiger, lets you add, delete, or edit the names and passwords of networks you use often. If you don't see a Preferred Networks option, something went wrong when you upgraded to Tiger.

To fix it, open the Network preference pane and select Network Port Configurations from the Show pop-up menu. Select the AirPort configuration and click on Delete. A new, trouble-free configuration should be created automatically.—TL

TERMINAL TRICKS

5 Clever Ways to Crack Tiger's Code

MODIFY THE iTUNES MESSAGE FORMAT IN iCHAT AV

When you use iChat's new Current iTunes Track status-message option to show others what you're listening to, it displays the iTunes information as *Song Name – Artist Name*. But many people prefer to see the artist's name first (see "iChat Your Way"). To set your own display format, quit iChat and open Terminal (/Applications/Utilities). Enter `defaults write com.apple.iChatAgent iTunesMessageFormat -string '%Artist - %Track'`.

Next, to restart the background process that controls iChat, type `killall iChatAgent`. When you relaunch iChat, you should see your newly formatted message. If you see `%Artist - %Track` instead, select another status message and then select the Current iTunes Track message. All should be fine.

There are other options available, too—try adding `%Album`, `%Year`, or `%URL` if you want. Just remember that there's a 42-character limit.—RG



iChat Your Way Change the way iChat's iTunes track listing lists your current hits.

UNCOVER UNUSED FILES

Have you ever wanted to remove unused files from a folder—for example, your user folder's Preferences folder? Finding the files isn't always easy—naming schemes are sometimes obvious only to the developer.

Enter Spotlight and the Unix `mdls` command. (See "Command Spotlight" at macworld.com/0680 for more information.) In this case, we'll use `mdls` to look at the kMDItemAttributeChangeDate attribute to track changes to a file's metadata, which is modified every time you or a program access the file.

For example, to see when your Dock's preferences were last updated, you type `cd ~/Library/Preferences` (to change to your Preferences directory) and then type `mdls com.apple.dock.plist | grep kMDItemAttributeChangeDate`.

When I enter the command, I get back `kMDItemAttributeChangeDate = 2005-06-21 20:39:44 -0700`.

Now I know that the file was last changed on June 21. When you're thinking about deleting something, use this trick first to quickly find out whether or not the unknown file has been accessed recently.—RG

GET FILE PATHS FAST

OS X has always let you drag a file or folder to the Terminal window to add its path to a command. However, you had to switch to the Finder, make sure the Terminal window was visible, and then drag the item into that window. Now you can simply copy the file or folder and then paste it into the Terminal window to add its path.—KM

SAVE TIME IN TERMINAL

If you're a Terminal maven, you'll be happy to know that in order to correctly copy or move files containing resource forks, you no longer need to use Apple's special `CpMac` and `MvMac` commands. The Tiger versions of the commands, `cp` and `mv`, are resource-fork–compatible.—KM

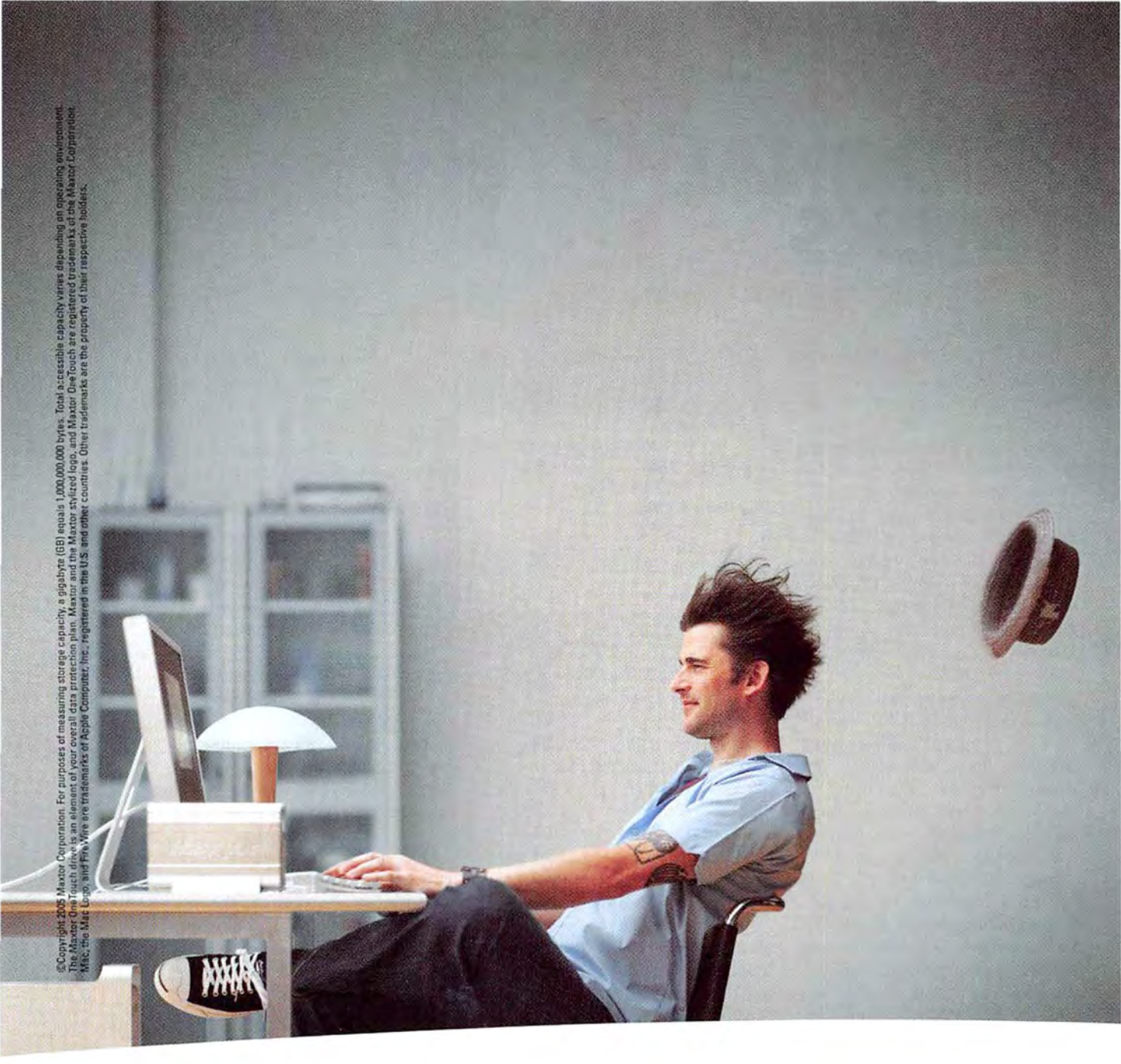
PROTECT INFORMATION WITH ACCESS CONTROL LISTS

Unix geeks will appreciate that Tiger supports Access Control Lists (ACLs). ACLs give you more control over permissions than you get from OS X's Info windows or even from standard Unix commands. For example, you can use ACLs to set unique access permissions for everyone who has an account on your Mac.

ACLs are enabled by default only in Mac OS X Server. But you can easily turn this feature on in the standard version of Tiger. In Terminal, type `sudo /usr/sbin/fsaclctl -p / -e` and then enter your administrator password at the prompt.

Type `man chmod` to learn more about using ACL features. One caution: creating an archived file, via the Create Archive command in the Finder, strips away any ACL information contained in the file.—TL

Contributing Editor CHRISTOPHER BREEN writes *Macworld's Mac 911* column. Senior Editor ROB GRIFFITHS runs the Mac OS X Hints Web site (www.macosxhints.com). Contributing Editor TED LANDAU is the author of *Mac OS X Help Line: Tiger Edition* (Peachpit Press, 2005). KELLY LUNSFORD is *Macworld*'s senior how-to editor. KIRK McELHEARN (www.mcelhearn.com) is a coauthor of *Mastering Mac OS X*, fourth edition (Sybex, 2005). DORI SMITH is the author of *Dashboard Widgets of Mac OS X Tiger: Visual QuickStart Guide* (Peachpit Press, 2005).



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Desktop or Laptop?
Professional or Consumer?
Here's How to Decide.

Which Mac Is Right for You?





BY ADAM C. ENGST
PHOTOGRAPHY BY PETER BELANGER

The cost of a Mac system hasn't changed much over the years. Of course, you get a lot more for your money now than you did in the past, but one way or another you'll probably spend somewhere between $1,000 and $3,000 on a new Mac. That makes a Mac one of the most expensive items you're likely to buy in an average year, so you'll want to make sure you choose the right model. Here's how to make that choice.





By the Book This article is an excerpt from the e-book *Take Control of Buying a Mac*, by Adam C. Engst (2005; reprinted by permission of TidBits Electronic Publishing, www.takecontrolbooks.com/mw).

TIP
APPLE STORE

Even if you decide not to buy from Apple's online store (store.apple.com), I recommend using it to figure out what to buy. Apple provides a clean and understandable interface for choosing options and comparing the prices of all Mac models and configurations.

Lending weight to the decision is the fact that you'll probably have to live with the Mac you buy for some time. So even though the industry moves rapidly, you'll want to make sure that your new computer can handle whatever you might throw at it in the future, until you want to (or can afford to) upgrade again. Obviously, your needs determine how often you upgrade: a graphics professional might upgrade frequently to take advantage of every speed boost, while a family with average e-mail and Web needs might be happy waiting three or four (or more) years between new Macs.

I've bought ten desktop and seven laptop Macs in the years I've been working on the Mac, and I've also helped innumerable friends, relatives, and readers pick what to buy and when to buy it. There are many correct answers here—everyone's needs are different—but the process I describe will eliminate the uncertainty and stress involved in choosing the Mac that will best fit your needs. Picking your new Mac can even be fun.



There are three aspects to the decision: choosing between a desktop and a laptop Mac, picking the right model, and selecting the appropriate configuration and expansion options.

THE MAC MATRIX

Apple's computer lineup is made up of consumer and professional desktops and laptops.

	Consumer	Professional
Desktop	iMac (www.apple.com/imac)	Power Mac (www.apple.com/powermac)
	eMac (www.apple.com/emac)	
	Mac mini (www.apple.com/macmini)	
Laptop	iBook (www.apple.com/ibook)	PowerBook (www.apple.com/powerbook)

WHICH KIND OF MAC?

Desktop or laptop? Many people make this decision instantly, without any trouble. Perhaps it's obvious that only a laptop will fit your lifestyle, or perhaps you need to supplement the desktop Mac you already have at home or work. On the other hand, perhaps your employer provides you with a Windows laptop that you carry when you travel, in which case a desktop Mac might be just the ticket. And of course, you might be able to make a good argument for needing both a desktop and a laptop.

DESKTOP OR LAPTOP?

Answer the following questions and award yourself one point for each yes answer, in each category—Desktop and Laptop. The category in which you have the most points is probably your best bet.

DESKTOP

- Is your life relatively fixed in the sense that you aren't likely to move frequently in the near future? yes ☐
- Do you travel infrequently and primarily for pleasure (without needing a computer)? yes ☐
- Do you live or work in spacious quarters with plenty of room for a large Mac and a monitor? yes ☐
- Do you work in the same place most of the time? yes ☐
- Is your work environment comfortable? yes ☐
- Does your work (desktop publishing, large spreadsheets, and so forth) require a large display? yes ☐
- Do you prefer a full desktop keyboard (from either Apple or another manufacturer) to a laptop keyboard? yes ☐
- Do you regularly use an external hard drive, a printer, a USB media-card reader, or other peripherals? yes ☐
- Do you prefer relatively durable electronic devices that are difficult to damage? yes ☐
- Do you prefer to use your Mac alone, to avoid interruptions? yes ☐
- Do you lust after a truly cool desktop Mac? yes ☐
- Is it important that your Mac remain useful as long as possible? yes ☐
- Do you need the best possible performance? yes ☐

TOTAL DESKTOP POINTS = ____



But if you're not entirely sure whether you need a desktop or a laptop Mac, answer the questions in the worksheet "Desktop or Laptop?"—give yourself one point for each question to which you can answer yes, and then add up the points in each category. The category in which you have the highest score is probably your best bet.

Your scores won't necessarily be the final word on whether you should buy a desktop Mac or a laptop Mac. But thinking about the answers to the questions should help you analyze your needs and desires, and comparing your final scores should make the answer a bit clearer.

CASE STUDY: JOHN HYLAS

John lives on his sailboat, on New York's Cayuga Lake, seven months of the year. When the weather turns cold and the marina closes, he takes his boat out of the water and finds someone who needs a house sitter for a few months until he leaves for his annual two-month stint in Hawaii. (His wandering lifestyle is made possible by his unique skill at squeezing the best possible performance from Cornell University's synchrotron.) So when he asked me what Mac he should buy, I told him that the obvious choice was a laptop—and that since it would be his primary Mac, he should choose one of the larger-screen PowerBooks. He ended up buying a 17-inch PowerBook G4 that was loaded to the gills, and he has become a total convert, particularly since he's realized he can do some of his work in coffeehouses with wireless Internet access.

DESKTOP PROS AND CONS

How Apple's consumer and professional desktop systems compare:

	Consumer (iMacs, eMacs, and Mac minis)	Professional (Power Macs)
Cost	Tend to be much less expensive.	More expensive, particularly if you must also purchase a new monitor.
Size	Use space efficiently because of the built-in monitor (iMac and eMac) or the small size (Mac mini).	Tend to require more space, either under or on your desk.
Style	Usually more stylish.	Fairly stylish within the constraints of providing a large, boxy case and separate monitor.
Expandability	All additional storage must be external; can accept less total RAM, though this is seldom a problem; can't add expansion cards, though most people don't need them.	Can often accept additional internal drives of varying types; highest possible RAM capacity at any given time; can accept a variety of special-purpose PCI cards.
Performance	Usually very good, but not the best.	Will provide the best performance available at the time of purchase.
Screen Options	Only the built-in display or screen mirroring (where the external monitor shows the same picture as the internal monitor), unless you use Screen Spanning Doctor (macparts.de/ibook/); Mac minis require a monitor but are less flexible than Power Macs.	Can run multiple displays of varying sizes in either screen-mirroring or extended-desktop mode (in which the second monitor makes your desktop that much larger) with no fuss.
Noise	Usually very quiet, since they're more commonly used in living spaces.	Historically have ranged from quiet to extremely loud, so check before buying.
Cabling	Require few cables.	Require many cables.



LAPTOP

Do you expect to move many times in the next few years? yes
Do you travel frequently and primarily on business for which you need a computer? yes
Do you live or work in tight quarters where you'd have trouble finding a spot for a desktop Mac? yes
Do you need to work in different places (library, conference room, and so on) frequently? yes
Is your work environment so uncomfortable that you'd rather use your computer while sitting on a couch or in an armchair? yes
Can you work effectively on a relatively small display? yes
Do you like the feel of Apple's laptop keyboards? (Test them in person if possible.) yes
Do you use external peripherals infrequently? yes
Are you careful with small, expensive, fragile objects? yes
Do you prefer to use your Mac in a common living area with other people around? yes
Do you lust after a truly cool laptop Mac? yes
Would you mind buying your next Mac a bit sooner than would be necessary with a desktop Mac? yes
Is performance less important to you than portability? yes

TOTAL LAPTOP POINTS = ____

TIP

MAC MINI

The Mac mini, which starts at $499, achieves its low price by eliminating a keyboard, a mouse, and a display, all of which you must buy separately. So although the Mac mini is a good deal, it's not necessarily as inexpensive as it may seem.

PICK THE RIGHT MODEL

Now that you've decided whether to buy a desktop or a laptop, you must determine which particular model makes the most sense for your needs. For the past several years, Apple has divided its computer product lines into two categories: consumer and professional (see "The Mac Matrix").

Despite this basic division, there are plenty of reasons that you might want a professional Mac for home use or a consumer Mac for the office.

DESKTOP If you've decided that your next Mac is to be a desktop unit, then deciding whether to buy a consumer-level Mac (an iMac, a Mac mini, or an eMac) or a professional-level Power Mac should be relatively easy, because Apple did a good job of differentiating the two product categories (see "Desktop Pros and Cons").

Here's one way to decide which desktop model is right for you:

First decide whether any of the features listed in "Desktop Pros and Cons" are must-haves, and whether any are deal breakers. For instance, if you must have multiple internal hard drives, a Power Mac is in your future. Similarly, if you can't imagine how you'd find enough money in your bank account, or space in your office, for a Power Mac, concentrate on the iMac, the eMac, or the Mac mini.



If there are conflicts between your must-haves and your deal breakers, list them in order of importance and see if that clarifies matters. To continue our example, if you want support for multiple internal drives but you can't afford a new Power Mac, you must either give up on the drives or consider buying a used Power Mac.



If you don't have any must-haves or deal breakers, mark the items in the table that are important to you and then compare the number of marks in the two columns. If there are more marks in the Consumer column, consider the iMac, the eMac, or the Mac mini; if most of your marks end up in the Professional column, a Power Mac may make the most sense for you.

When evaluating these pros and cons, try to keep both the present and the future in mind. Perhaps you don't need a lot of disk space right away, but if you're planning to use a digital camcorder and iMovie in a few months, you'll want more storage space for your video clips.

LAPTOP While Apple has clearly differentiated its consumer desktops and its professional desktops, it hasn't made such clear-cut distinctions with its laptop offerings. That's largely due to the fact that the most important feature of a laptop—its size—cuts across the iBook and PowerBook lines.

To determine which laptop size is right for you, first decide whether you're buying the laptop as your primary Mac (for everyday use) or secondary Mac (for traveling or times when you can't access your desktop Mac).

If this laptop is going to be your main Mac, lean toward the laptops with larger screens—because larger screens increase productivity. Also, Power-

LAPTOP PROS AND CONS

How Apple's consumer and professional portables compare:

	Consumer (iBooks)	Professional (PowerBooks)
Cost	Less expensive.	More expensive.
Size	Larger and heavier than the smallest PowerBook, but smaller and lighter than the larger PowerBooks.	Size and weight vary widely, depending primarily on screen size.
Style	Slightly more utilitarian and durable.	Somewhat flashier.
Expandability	Lower RAM capacity; no PC Card slots; fewer and slower ports.	Higher RAM capacity; PC Card slots on larger models; more and faster ports (such as FireWire 800).
Performance	Lower performance in terms of CPU speed, CPU cache size, and bus speed.	Excellent performance, though not up to the standards of desktop Macs of the same generation.
Screen Options	Either 12 or 14 inches, though both show the same amount of information in 1,024 by 768 pixels; have to use Screen Spanning Doctor (macparts.de/ibook/) if you want additional screen space.	12, 15, or 17 inches, with the amount of information displayed increasing as screen size increases; supports both screen mirroring and extended-desktop mode.
Optical Drives	12-inch model currently available only with a Combo drive (CD-RW/DVD-R).	All models come with a SuperDrive (CD-RW/DVD-RW).

CASE STUDY: TERRY DELANEY

My friend Terry wanted advice on the type of Mac he should buy for his son to take to college. After talking with Terry about his son's needs, which included some video production with iMovie, I recommended a 12-inch PowerBook. Although its performance didn't compare with the performance of the Power Mac line, it performed much better than iBooks at the time. Its price and portability made it more attractive than the 15- or 17-inch PowerBook. It had a SuperDrive for making DVDs and backups. (Never underestimate the importance of backups!) It could drive an external monitor in extended-desktop mode, which can be very handy when working with multiple applications simultaneously. Had Terry's son needed the laptop purely for e-mail, Web browsing, and basic word processing, I would have recommended the 12-inch iBook instead, since the additional performance and flexibility of the 12-inch PowerBook wouldn't have been necessary.

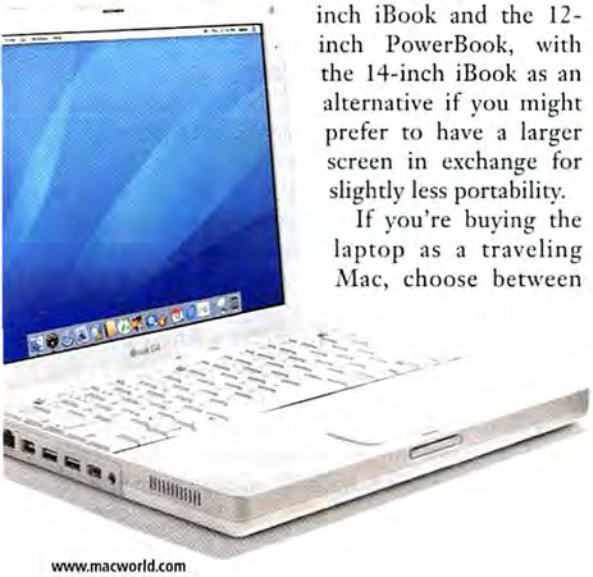
Books with larger screens tend to have faster CPUs than those with small screens; if this is your only Mac, that extra performance helps.

If, on the other hand, you're buying this laptop to supplement a desktop Mac, then trading screen size and performance for a smaller and lighter package that's easier to carry and costs less may make more sense.

Once you've decided on the laptop size, you need to choose a particular model. "Laptop Pros and Cons" outlines the differences between iBooks and PowerBooks.

Here's my laptop buying advice:

If this laptop is to be your primary computer, choose between the 15- and 17-inch PowerBooks, basing your decision on price and whether the larger model would be awkward for how you plan to use it. If you can't afford even the 15-inch PowerBook, choose between the 12-inch iBook and the 12-inch PowerBook, with the 14-inch iBook as an alternative if you might prefer to have a larger screen in exchange for slightly less portability.



If you're buying the laptop as a traveling Mac, choose between the 12-inch iBook and the 12-inch PowerBook, both of which are excellent. The price and performance differences aren't great, so make your decision based on the PowerBook's other advantages, such as the SuperDrive option and extended-desktop support with multiple monitors. □

TIP **MULTIPLE MONITORS**

Whether you would want to attach multiple monitors to your Mac depends on your budget, your desk, and your Mac's purpose, but I've used a pair of monitors with every desktop Mac I've owned since my SE/30 in 1990, and I wouldn't work any other way. Research shows that increasing screen size increases productivity, since you spend less time scrolling. Other studies show that two smaller monitors attached to a computer increase productivity more than one large monitor. You don't need more than one monitor if you use your Mac only to browse the Web and read e-mail. But if you work in several applications simultaneously, moving data between them as you go, I encourage you to think about a multiple-monitor system.

Contributing Editor ADAM C. ENGST is the publisher of TidBits and of the *Take Control* e-book series (www.takecontrolbooks.com/mw). He has written numerous best-selling technical books.

HOW THEY RATE

Ratings, prices, and test scores for Apple's current desktops and portables:

Product	Processor	Display	Rating	More Information	Best Price[A]	Speedmark Score[B]
DESKTOP						
iMac	G5/1.8GHz	17 inches	●●●●	macworld.com/0599	$1,249	163
	G5/2GHz	17 inches	●●●●	macworld.com/0600	$1,449	174
	G5/2GHz	20 inches	●●●●½	macworld.com/0601	$1,720	174
eMac	G4/1.42GHz (Combo drive)	17 inches	●●●½	macworld.com/0602	$790	140
	G4/1.42GHz (SuperDrive)	17 inches	●●●●	macworld.com/0603	$994	142
Mac mini	G4/1.25GHz	not included	●●●½	macworld.com/0316	$494	100
	G4/1.42GHz (Combo drive)	not included	●●●●	macworld.com/0321	$594	115
	G4/1.42GHz (SuperDrive)	not included	●●●●½	macworld.com/0709	$694	115
Power Mac	G5/dual-2GHz	not included	●●●●	macworld.com/0604	$1,841	205
	G5/dual-2.3GHz	not included	●●●●	macworld.com/0605	$2,250	226
	G5/dual-2.7GHz	not included	●●●●	macworld.com/0606	$2,679	250
PORTABLE						
iBook	G4/1.33GHz	12 inches	●●●●	macworld.com/0705	$958	106
	G4/1.42GHz (SuperDrive)	14 inches	●●●	macworld.com/0706	$1,294	111
PowerBook	G4/1.5GHz (Combo drive)	12 inches	●●●●	macworld.com/0398	$1,355	not tested
	G4/1.5GHz (SuperDrive)	12 inches	●●●●	macworld.com/0399	$1,550	not tested
	G4/1.5GHz	15 inches	●●●●	macworld.com/0400	$1,729	123
	G4/1.67GHz	15 inches	●●●●	macworld.com/0401	$2,058	not tested
	G4/1.67GHz	17 inches	●●●●	macworld.com/0402	$2,248	135

[A] From a PriceGrabber survey of retailers as of August 8, 2005. [B] Speedmark 4 is Macworld Lab's standard test tool for benchmarking systems running Mac OS X 10.4 (Tiger). For information on Speedmark testing, go to www.macworld.com/speedmark.

Use Mail's Smarts

With many people rarely picking up the phone anymore, it's easy to find yourself overwhelmed by a deluge of e-mail. Mail 2.0 (included with OS X 10.4) can help. Its new Smart Mailbox feature lets you see a dynamic view of messages matching criteria you specify.

Use smart mailboxes to show high-priority messages received today, to highlight all the correspondence between you and a friend, or to identify space-hogging attachments. And with a little know-how, you can combine multiple smart mailboxes to do even more.

Think Outside the Inbox

If you've ever set up a smart playlist in iTunes, a smart folder in the Finder, or a rule in Mail, you'll find smart mailboxes familiar. To create a basic smart mailbox, choose Mailbox: New Smart Mailbox. In the sheet that appears, give your new mailbox a name and specify one or more conditions, such as the sender's e-mail address or a word in the subject line. To organize smart mailboxes within your Mailbox list, choose Mailbox: New Smart Mailbox Folder. You can nest one smart mailbox folder within another, but you can't move these folders up in your Mailbox list—for instance, above the Inbox.



Mailbox Magic A smart mailbox can quickly locate messages that meet one or more conditions you specify. When All is selected in the first pop-up menu, a message must match every condition to appear in the mailbox.

Mail uses its Spotlight index to find all messages matching your smart mailbox's conditions. It doesn't move the messages into the mailbox, but rather displays messages that are stored elsewhere. Nevertheless, you can open, delete, or reply to messages in a smart mailbox just as you could if you were viewing them in any other mailbox.

You can add more criteria to a smart mailbox definition by clicking on the plus-sign button (+). But be mindful of the Any or All pop-up menu, which frustrates many Mail users. Think of All as AND (a message must meet every condition to appear in the mailbox) and Any as OR (a message must meet just one condition). If a smart mailbox doesn't display the messages you think it should, check the Any or All setting.

Put Smart Folders to Work

Although setting up smart mailboxes is easy, coming up with good ways to use them can be more challenging. Here are some ideas.

Track Unread Messages If you already use rules to sort your mail (for example, to send bank statements to a Finance mailbox and discount-airfare notices to a Travel mailbox), you may want an easy way to see *all* your unread messages, regardless of where they're stored. To do this, create a smart mailbox with just one condition: Message Is Unread. Similarly, you can set up a smart mailbox to display only flagged messages, using the condition Message Is Flagged; only messages received today (Date Received Is Today); or only messages that meet

continues

Marvelously Matching Mailboxes



Once you've painstakingly created the perfect smart mailboxes on your desktop Mac with Mail 2.0, you don't *have* to go through the process again to set up your laptop. If you use more than one Mac and have a .Mac subscription, you can sync your smart mailboxes (along with your rules and signatures) with your other machines.

To do this, choose Mail: Preferences, click on General, and select the Rules, Signatures, And Smart Mailboxes option. If you haven't enabled syncing in your .Mac account, follow the on-screen instructions to do so. The synchronization will occur according to the schedule you set in the .Mac preference pane.

Be aware that one smart mailbox may display different contents on each machine. Smart mailboxes act more like Finder searches than like static mailboxes, so if the messages stored on the two machines are different, the contents of their corresponding smart mailboxes will be, too.

One way to avoid this is to synchronize your mail. You can do so by going to Mail: Preferences, clicking on General, and selecting the Accounts option under Synchronize With Other Computers Using .Mac. Another solution is to simply keep your e-mail messages on the server, using an IMAP, a .Mac, or a Microsoft Exchange e-mail account. When you do that, you'll see the same messages no matter which machine you use.



The Xerox Phaser® 7750 network printer gives you color so vivid, you're naturally drawn to it. And at 35 color ppm, it's sure to make your heart flutter.

Xerox Color. It makes business sense.

The color is truly stunning, and the speed simply breathtaking. That sums up the Xerox Phaser 7750 tabloid color laser printer. It not only prints 35 ppm in black and white, it prints just as fast in color. And it can deliver up to an incredible 1200 dpi. Its single-pass laser technology prints up to 11x17 full bleed. Color is Pantone-approved,



Adobe PostScript 3

too, for accurate proofing. What's more, Phaser Match™ 3.0 color management software ensures the colors you want are the colors you get. For more about our full line of Xerox network printers, digital copiers and multi-function systems, just call us or visit our website today. We'll be happy to provide you with the stunning details.

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All in the Family Use two smart mailboxes to find messages that would elude either alone. Here, the first smart mailbox (Family) displays messages from any family member, and the second one (High-Priority Family Messages) displays only high-priority messages from the first mailbox.

multiple conditions (such as unread, flagged messages received today).

Highlight Important People If you receive a lot of e-mail, you may want a quick way to find unread messages from your A-list contacts. A smart mailbox can help. First, open Address Book and create a new group (File: New Group) containing just the contacts you want to highlight. Then, in Mail, create a new smart mailbox with two conditions: Sender Is Member Of Group (with your new group selected) and Message Is Unread. Now you can see new messages from the boss or a big client with just one click.

Keep Up with the Conversation To easily follow the thread of a long exchange, create a smart mailbox with Any selected, and add two conditions: From Contains followed by your correspondent's e-mail address, and Any Recipient Contains followed by your own e-mail address. (If you or the other person used multiple addresses, add those as conditions, too.) Select the Include Messages From Sent option and click on OK. Then choose View: Organize By Thread. All the messages you've exchanged with that person will appear, nicely threaded, in the new smart mailbox.

Ax Unneeded Attachments If you save old messages, their attachments will quickly eat up disk space. If you've copied the attachments to other folders (or no longer need them), you can shrink your mailboxes considerably by removing attachments from old messages. Find them by creating a smart mailbox with the condition Contains Attachments. (To find just attachments of a particular type, such as PDF or Microsoft Word files, add the condition Any Attachment Name Ends With followed by the file type's extension.)

To include attachments you've sent, also select the Include Messages From Sent option. You can then quickly scan this mailbox for unneeded files, select the messages, and choose Message: Remove Attachments.

Take It to the Next Level

If you start using smart mailboxes regularly, you'll soon begin to wish that they could do even more.





For example, unlike a rule, a smart mailbox can't search hidden headers (such as X-List or Message-Id), even if you choose Entire Message as the place to search. (Searching these headers comes in handy, say, when you want to identify mailing-list messages that have no fixed sender, recipient, or subject.)

You can work around some limitations by making use of the fact that smart mailboxes can search other smart mailboxes when you add the condition Message Is In Mailbox. This capability makes possible some interesting search criteria that one smart mailbox can't offer alone.

For example, a smart mailbox can look for any or all of its conditions being met, but it can't look for a message that meets condition A AND either condition B OR condition C. In other words, you can't make one that looks for messages that are high priority *and* from your mother *or* your sister *or* your brother.

To work around this shortcoming, use two smart mailboxes. Start by creating a single smart mailbox (Mailbox: New Smart Mailbox). In this example, you might name it Family. Choose Any from the pop-up menu, and add conditions (such as From Contains) for each family member. This mailbox now displays all messages (of any priority) from any of your family members. Then create a second smart mailbox, perhaps called High-Priority Family. Choose All from the pop-up menu, and add two conditions: Message Is In Mailbox Family and Priority Is High. Now you've narrowed down your search to just high-priority messages from your family.

ICON BY PAUL HOWALT

Get Smart

With a little planning, you can use smart mailboxes to save yourself a lot of effort. Together with Spotlight searches and rules, they make Mail 2.0 a very powerful tool. □

JOE KISSELL is the author of the *Take Control of Email with Apple Mail*, *Take Control of Mac OS X Backups*, and *Take Control of Upgrading to Tiger* e-books (TidBits Electronic Publishing, 2005).

TRY THIS

My Icon, Myself



Feeling mad, mopey, magnificent? When it comes to communicating your mood, the .Mac globe and the AOL icon really won't do. Instead, browse Tiger's 131 new stock iChat icons to find one that fits. Go to Buddies: Change My Picture. In the Buddy Picture window, click on Choose. In the resulting dialog box, click on iChat Icons in the list. Here you can select from Flags, Fruit, Flowers, Hollowbody Guitars, Fung Shui, Planets, Tribal Masks, and more.—SCHOLLE SAWYER MCFARLAND



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Fix iTunes and iPod Problems

Apple has created a winning combination with iTunes and the iPod—products that are both fun and easy to use. But even these well-designed feats of Apple software and hardware engineering can cause a few headaches from time to time (some of the new difficulties are due to changes wrought by Tiger). Here are some problems you're likely to encounter and how to fix them.

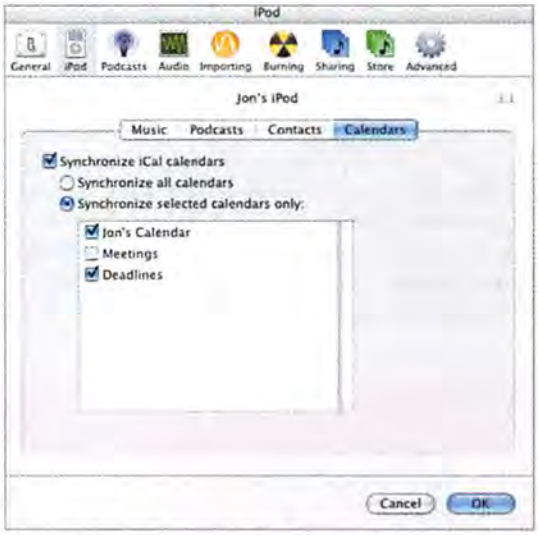
playlist

Want more tips on digital music? For iPod- and iTunes-related expert advice and breaking news, as well as reviews of all the latest gadgets, check out playlistmag.com.

Sync Contacts and Calendars

I used to use iSync to sync my Mac's Address Book contacts and iCal calendars with my iPod. Now that I've switched to Tiger, my iPod no longer shows up in iSync.

With Tiger, Apple removed syncing for iPods (but not for PDAs and cell phones) from its iSync 2.0 synchronization application and moved that functionality into iTunes. To activate synchronization of calendars and contacts with your iPod, first go to iTunes' iPod preference pane. There you'll find both Contacts and Calendars tabs. Within each, you can choose to enable synchronization, as well as whether to sync all contacts or calendars or just selected groups or calendars (see "Savvy Scheduling"). The big benefit to moving these functions into iTunes is that the information will automatically update whenever you plug in your iPod—you no longer need to remember to launch iSync and click on the Sync Devices button.



Savvy Scheduling With iTunes taking over duties from iSync, getting your contacts and calendars onto your iPod is easier than ever.

Make Your iPod Mount

Here are some steps to take if your iPod doesn't mount, or if it doesn't appear in iTunes or the iPod Software Updater utility:

1. Make sure that the iPod is plugged directly into a FireWire port, rather than a chain of FireWire devices (the iPod requires just about all the power a FireWire port can deliver), or that it's plugged into a high-power USB 2.0 port (your Mac won't recognize the iPod if it's using a low-power USB port, such as the ones on your keyboard).

2. Your iPod may be frozen. Reset it by unplugging the iPod and holding down the menu and select (center) buttons on newer iPod and iPod mini models, or the play/pause and menu buttons on older iPods, until you see the Apple logo on the iPod's screen.

3. Restart your Mac while holding down the shift key to disable startup items. If your iPod responds well to this treatment (that is, if it mounts properly), you should use the iPod Software Updater to restore the software it shipped with (note that this will delete all the music and playlists on your iPod).

4. If the iPod still won't mount, reset it and then hold down the play and select buttons to start it up in Disk Mode (similar to the Mac's FireWire Target Disk mode), forcing it to mount. An iPod that mounts only in Disk Mode also requires software restoration.—CHRISTOPHER BREEN

Access Your Protected Music Files

After I upgraded to Tiger, songs I had purchased from the iTunes Music Store stopped syncing with my iPod and no longer played in iTunes.

For some reason, upgrading to Tiger confuses many Macs when it comes to iTunes Music Store content. I've witnessed people connecting their iPods after an upgrade to Tiger, only to find that their purchased music wouldn't sync as it had before. And the first time I launched iTunes after upgrading, I could select a purchased song in iTunes, but when I attempted to play it on the Mac, nothing happened. If you're having this problem, the solution is simple: select Deauthorize Computer from iTunes' Advanced menu, and then double-click on one of your protected purchased music files. iTunes will prompt you to enter your password, and it will then connect to a server to reestablish your ability to play and transfer those files (don't worry, iTunes

continues

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Christopher Breen of Playlist Magazine had this to say about his 2100mAh NewerTech High-Capacity iPod Battery, "I've yet to find a $40 accessory that adds as much value..."



WIRED NEWS ExtremeiPod

highly recommended MacUser playlist

Take your iPod on the road

RoadTrip!+
NEW FM Transmitter + iPod Charger for iPods with dock connector. Charges and broadcasts clean and clear – all in one.

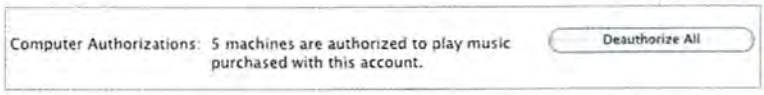
RoadTrip!
FM Transmitter for any iPod or music player. Listen to your music through your car's FM radio. Choose either the 87.9MHz or the 107.7MHz version!



NewerTech.com/roadtrip

B+ recommended

MW_10_05 Other World Computing, Newer Technology, a part of New Concepts Development Corp., 1004 Courtaulds Dr., Woodstock, IL 60098
Prices, specifications, and availability are subject to change without notice. Items returned within 30 days may be subject to a restocking fee. No return will be accepted without Return Merchandise Authorization number.



Instant Reset Apple makes it easy to deauthorize all your Macs, wherever they may be, with the click of a button.

won't interpret this procedure as adding another authorized computer).

Reset Your Authorized Macs

When I try to authorize a Mac to play my purchased music, iTunes claims I've reached my limit.

If you've authorized five computers to listen to songs you've purchased from the iTunes Music Store, then you've reached Apple's limit. To listen on another computer, you'll need to deauthorize one (in iTunes, choose Advanced: Deauthorize Computer). But what if you've swapped hard drives or sold an old Mac, or what if you just don't have access to one of the computers you want to deauthorize?

Select Music Store in iTunes' Source window, and then log in to your iTunes account by clicking on your name next to the word Account in the upper right corner, entering your password, and clicking on the View Account button. If you've used up all your authorizations, you'll see a line that reads "Computer Authorizations: 5 machines are authorized to play music purchased with this account." Click on the Deauthorize All button (see "Instant Reset"), and Apple will clear its database of all Macs authorized to play songs linked to your account—including machines with dead hard drives, those you've given away, and so on (note that this button appears only when you've used up all five of your authorizations). The next time you try to listen to your purchased music on any Mac, iTunes will prompt you to enter your password and authorize that computer.

Current Hit Sick of not seeing the correct artwork for the current song? Change the album-art window's title bar to Now Playing.

Display Artwork for Current Songs

When iTunes switches to a new song, the album art doesn't change along with it.

By default, iTunes shows you the album art for the track you've selected and highlighted—that way, you don't have to play a song to see the art associated with it. If you'd prefer to see the cover for the song you're listening to at any given moment, click on the album-art window's title bar (see "Current Hit") to toggle it from Selected Song to Now Playing.



Exclude Certain Songs from Shuffle

When shuffling through the music in my library, I don't really want to hear comedy routines or my voice recordings—but iTunes doesn't differentiate between those and music.

You could create a smart playlist, but another way is to use iTunes' check boxes. iTunes picks only songs with check marks to the left of their names, so you can just deselect the songs you want excluded—they'll still play if you select them manually. If you have lots of songs to exclude, create a playlist with all the songs in it, and then select all of them and control-click on one of the tracks. iTunes will give you an Uncheck Selection option—much easier than clicking on check boxes one at a time. □

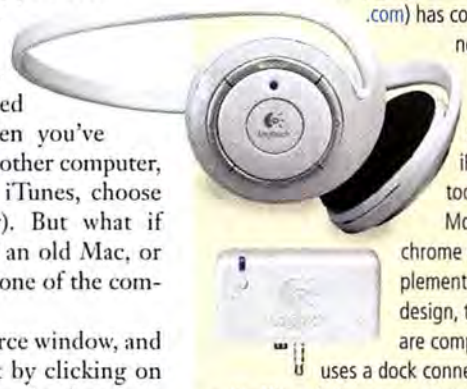
Senior News Editor JONATHAN SEFF alternates between a 40GB fourth-generation iPod and a 512MB iPod shuffle, and his iTunes library is approaching 19,000 songs.

ICON BY PAUL HOWALT

CHECK IT OUT

Cut the Cord

One major problem with traditional headphones is that they tether you to your iPod, and that connecting cord can really get in the way. Logitech (www.logitech.com) has come up with a solution: its new Wireless Headphones for iPod. You can use these $150 headphones as far as 30 feet away from your iPod, with the aid of a Bluetooth 2.1 wireless adapter. Molded in white plastic with chrome embellishments that complement Apple's original iPod design, the Wireless Headphones are compatible with any iPod that uses a dock connector. They're equipped with 40mm full-range neodymium drivers. Controls on the headphones let you adjust volume as well as control what's playing with forward, back, and play/pause buttons. The headphones use a behind-the-head headband design and weigh 3.2 ounces (the adapter adds another ounce).



Logitech's wireless headphones rely on rechargeable batteries that last as long as 8 hours per charge and take about 2.5 hours to recharge fully. You can charge the adapter and headphones simultaneously with the included AC adapter.—PETER COHEN

iSkin

Go Wild



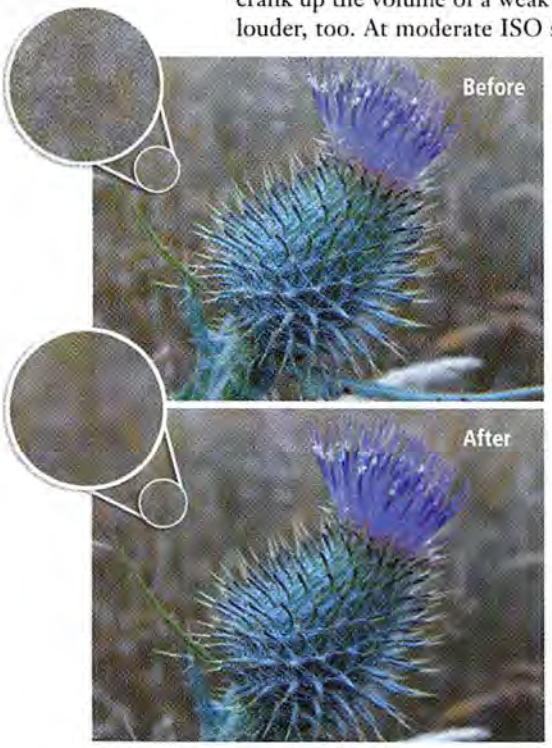
Protection for your iPod, iPod mini, iPod shuffle, Apple Keyboard and Apple PowerBook keyboard

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Silence Noisy Photos

Want to take sharp low-light photos without the glare of a flash? How about capturing high-speed daytime action, such as your kid's debut as a soccer goalie? By using your camera's menus to increase the ISO setting, you can capture tricky shots such as these and expand your picture-taking options—but at a cost.



Prickly Problem In this photo of a wild thistle, photographed at dusk at an ISO setting of 800, the out-of-focus areas surrounding the thistle are a cacophony of digital noise (top). After I applied a noise-reduction filter and a layer mask to restore lost detail, the background quieted down (bottom).

Raising the ISO will also increase the amount of image *noise*—unsightly flecks that can make it look as if you took your picture during a digital snowstorm. Because image editors have trouble distinguishing these errant particles from legitimate image details, removing noise can be a challenge. Both Adobe Photoshop Elements 3 ($90; www.adobe.com) and Photoshop CS2 ($599) provide a Reduce Noise filter that can minimize image noise. But getting the best results requires a deft touch.

What Causes Noise

When you raise your camera's ISO setting, you essentially make it more sensitive to light. This makes low-light photos easier to shoot because exposure times are shorter, decreasing the chance of blurring. By day, the faster shutter speeds help freeze action. To get these results, a digital camera amplifies the data that hits its sensor. But it's like a radio: when you crank up the volume of a weak signal, the static gets louder, too. At moderate ISO settings, such as 200, noise tends to be subtle. But at high ISO speeds—400 or higher—the noise can be deafening. It's especially noticeable in areas containing minimal detail, such as a blue sky, a smooth-cheeked baby, or blurred backgrounds (see "Prickly Problem").

Basic Noise Reduction

Although the noise in every image is different, the steps for solving the problem are similar in Photoshop CS2 and Photoshop Elements.



Quiet Down Photoshop CS2's Reduce Noise filter lets you define just how much correction should be done.

Step 1 Open the noisy photo and make a copy of its background layer by pressing ⌘-J.

Step 2 Select the duplicate layer in the Layers palette and choose Filter: Noise: Reduce Noise (see "Quiet Down").

In the Reduce Noise dialog box, drag the Strength slider to the right to increase the amount of noise reduction. As you do this, areas containing fine detail will begin to blur. To minimize the blurring, drag the Preserve Details slider to the right. Alternate between the two sliders until you've found a happy medium. Your goal is to reduce the noise where it's most apparent without introducing obvious blurring in areas containing fine details.

Step 3 Inexpensive digital cameras tend to produce *chrominance* noise, which can look like splotchy green or pink stains. If your photo also suffers from this type of noise, drag the Reduce Color Noise slider to the right until the color becomes less noticeable.

Step 4 If you're using Photoshop CS2, you'll see a couple of additional options in the Reduce Noise dialog box. For example, you can use the Sharpen Details slider to restore some crispness to a photo. Click on the Advanced radio button, and you can isolate individual color channels (red, green, and blue) and apply different noise-reduction settings to each. Depending on your camera and the subject of

your photo, you may find that most of the noise is in just one color channel.

Step 5 When you're done, click on OK.

Advanced Noise Reduction

If you're happy with the photo, you can stop here. In many cases, however, the Reduce Noise filter blurs areas containing fine details.

With a little extra work, you can get the best of both worlds—sharp details and less noise. The trick is to selectively blend the filtered layer with the original layer beneath it. This technique lets you apply noise reduction only to an image's most apparent noise. It also lets you be more aggressive when removing noise in the first place, since you'll be able to restore detail lost in the process.

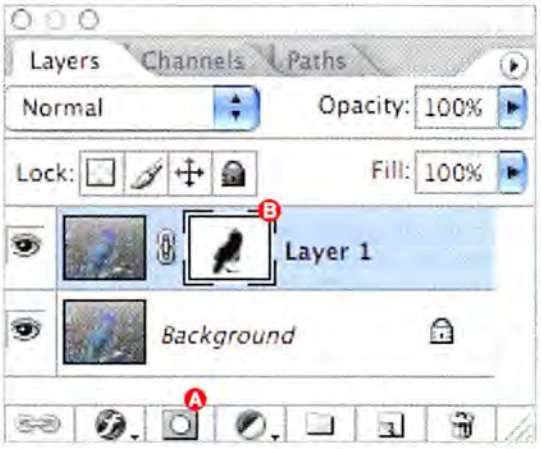
For maximum control when blending layers, do what the pros do: use a layer mask on the filtered layer. Layer masks let you selectively hide a layer's pixels (thus revealing the underlying layers) without actually erasing any data, so you can easily restore the pixels later. This approach lets you experiment without worrying about permanently altering your image.

Step 1 To create a layer mask in Photoshop CS2, select the duplicate layer in the Layers palette and click on the Add Layer Mask button Ⓐ at the bottom of the Layers palette (see "Behind the Mask").

Step 2 Click on the new layer mask Ⓑ to select it.

Step 3 Select the Brush tool from the Tools palette and choose an appropriate brush size from the Tool Options bar.

Step 4 With your brush color set to black, paint over the areas where important detail was lost. As you paint, you'll reveal the details in the underlying layer. If you go too far and uncover some of the original noise, switch the brush color to white (press the X key to do this quickly) and paint back over the area. This will return the pixels in the filtered layer to full opacity. Alternate between painting with black and white until you find the best blend of the two layers.



Behind the Mask Clicking on the Add Layer Mask button Ⓐ attaches a layer mask Ⓑ to your filtered layer. Painting on this layer with black reveals the underlying image.

Elements' Secret Layer Mask

Photoshop Elements doesn't have a layer-mask feature, but you can simulate one by using a fill layer.

Step 1 Go to Layer: New Fill Layer: Solid Color. Choose any color in the dialog box that appears. Then click on OK.

Step 2 In the Layers palette, drag the new fill layer below the layer you want to mask—in this case, the duplicate layer with the Reduce Noise filter applied.

Step 3 Select that duplicate layer and press ⌘-G; this groups it with the fill layer.

At this point, the fill layer will act as a layer mask. As with layer masks in Photoshop CS2, you paint on it with black to reveal the underlying layer, or paint with white to hide it.

Final Noise

When eliminating noise, remember that you'll get more realistic-looking results if you apply noise reduction judiciously. Go overboard, and you'll end up with artificial-looking images. □

Contributing Editor JIM HEID is the author of *The Macintosh iLife '05* (Peachpit Press/Avondale Media, 2005) and its companion Web site, www.macilife.com.

Plug In to Noise Reduction

If Adobe's Reduce Noise filter doesn't quiet photos to your satisfaction, you may want to shop for a noise-reduction plug-in. Numerous products are available for Photoshop CS2 and Elements alike, and some are also available as stand-alone programs—handy if you don't own Photoshop or Elements. All of them provide more-aggressive noise reduction than Photoshop's Reduce Noise filter. They also make it easier to create an artificial-looking image, though, so use them carefully.

Digital Gem For an inexpensive option, I recommend Kodak's Digital Gem ($49; www.asf.com). It couldn't be easier to use (something that can't be said of most other noise-reduction plug-ins), and its built-in sharpening feature lets you restore some of the detail that the noise-reduction process removes.

Digital Gem Professional For more control without a lot more complexity, Kodak's Digital Gem Professional ($99) is a good choice. It lets you blend the filtered and unfiltered versions of your image to restore detail and avoid artificial-looking results. And unlike Digital Gem, it works on 16-bit images—important if you're an advanced photographer working with Raw-format photos.

Noise Ninja For an obsessive level of control over noise reduction, check out PictureCode's Noise Ninja (8-bit version, $45; 16-bit version, $80; www.picturecode.com). Noise Ninja relies on *profiles* that describe a particular camera's noise characteristics, so you can have Noise Ninja build a profile specific to the image you've opened. Noise Ninja also provides a unique "noise brush" that lets you selectively restore details in a way that's similar to using a layer mask.

Going Solo Don't own Photoshop CS2 or Photoshop Elements? Noise Ninja is also available as a stand-alone program. Another option is to run Photoshop plug-ins using Lemke Software's GraphicConverter X ($35; www.lemkesoft.com), but if you're serious enough about your photography to be considering third-party noise-reduction software, you might as well pay a bit more for Photoshop Elements.

Avoid iMovie HD Annoyances

iMovie HD, the video-editing component of the iLife '05 suite, isn't just a tweaked update to previous versions. Apple completely rewrote big chunks of the program's code. Put another way, big chunks of the program are now at version 1.0. And you know what that means: bugs.



By the Book This article is an excerpt from *iMovie HD & iDVD 5: The Missing Manual*, by David Pogue (2005; reprinted by permission of O'Reilly Media). For more information, go to www.missingmanuals.com.

Here are a few of the most common iMovie HD problems—and the world's best attempts at solving them.

iMovie Misbehaves When Accessing Files on an External Disk

The disk on which your iMovie HD project sits must be prepared using the Mac OS Extended formatting scheme, also known as HFS+. All Apple drives come formatted that way, but some people have been known to buy an external FireWire hard drive from another company, plug it in, save an iMovie project onto it, and immediately run into massive problems. The fun may include dialog boxes that complain about file permissions, missing files, and "Icon" documents. If you've just bought a new drive, check the disk format before using it. Do that by highlighting the disk icon in the Finder and choosing File: Get Info. Under the Format heading in the resulting dialog box, you'll see the formatting scheme identified. If the format isn't correct, use Disk Utility to reformat the drive (this involves erasing the whole drive).

Camera Stops Importing after Two or Three Seconds

The likely culprit is FileVault, a feature of OS X 10.3 and later that encrypts files in your Home folder so that ne'er-do-wells in the neighborhood can't break in when you're not at your desk. If you save an iMovie HD project into your Home folder with FileVault turned on, the Mac will try to encrypt the video you're importing from the camcorder in real time—and this can't be done. Either turn off FileVault (in the Security preference pane) or save your iMovie HD project someplace outside your Home folder.

Tip Don't let the dimensions shown in the Movie: Share dialog box confuse you. For wide-screen projects, the settings are wrong. They say the exported CD-ROM movie will be 320 by 240, for example, when in fact it will be 320 by 180.

iSight Titles and Transitions Look Wrong

Sometimes iMovie HD imports video from an iSight camera at the wrong image size. The video looks fine in the iMovie window. But if you add titles and transitions to the video, they appear in the upper left corner of the iMovie window.

Actually, the titles and transitions are OK; it's the iSight video that's the wrong size. The trick is to choose Window: Show Full Size Resolution before you import the video. Then the iSight video should arrive at the proper size.

Wide-Screen Video Gets Letterboxed

Some camcorders offer a special shooting mode called 16:9 video (that is, wide-screen format). When you import this 16:9 video into a DV Widescreen project, iMovie HD sometimes wants to letterbox it, adding horizontal black bands above and below. Since the video is already 16:9, that's probably not what you want iMovie HD to do.

The letterboxing begins as soon as you switch from Camera mode to Edit mode and click on a clip. The workaround is to not switch modes after you've imported your video. Instead of switching to Edit mode, stay in Camera mode. Save the project, quit iMovie, and turn off the camera. When you reopen the project, the video will stay 16:9.

iMovie's Golden Rules

If there's any common wisdom at all about iMovie, this is it: a pair of golden rules that will stave off a huge number of problems down the road.

Upgrade Use the latest version. Each .01 or .02 upgrade zaps a whole host of bugs and glitches. These updates are free, so when your Software Update program advises you that one is available, jump at the chance to install it.

Record 16-Bit Audio The typical digital camcorder can record its audio track using either 12-bit or 16-bit audio. The factory setting is 12 bits, which gives people who don't edit on computers a chance to overlay a second audio track without erasing the original camera sound. The trouble is, 12-bit audio may slowly drift out of sync with the video when you burn the finished project to DVD.



Title Backgrounds Appear Jagged

The quality of the image behind a title in iMovie HD isn't as good as it once was, especially if you burn the movie to DVD. The title looks great, but the background acquires *jaggies*, stair-step lines along hard edges (see "A Case of the Jaggies"). DV and DV Widescreen projects seem to be the most vulnerable.

Here are some tricks to minimize the jaggies:

Reposition Try placing your title over video that contains natural objects instead of artificial ones. Faces, landscapes, and flowers tend to work better than rooflines, deck railings, and fences. Avoid objects containing straight lines and hard edges.

Keep It Steady Place the title over video that doesn't move. A clip that zooms in on a building may look worse than a clip with no motion.

Blur the Image Before importing the photo, soften the image a bit. Try iPhoto's Edit: Adjust: Sharpness function or Adobe Photoshop's Gaussian Blur.

Convert Before adding the title, export the clip to a DVCPRO – NTSC QuickTime movie and then reimport that to iMovie HD. (If your video is in PAL format, use DVCPRO – PAL instead.)

Go Solid Place the title over a black frame instead of a video clip.

Title Flows over Edge of Movie

A small bug in iMovie HD sometimes allows a title to flow off the left and right edges of the movie. The solution is to drag iMovie's text-size slider to the left to make the text smaller and then try again.

Scrolling Block Title Scrolls Too Fast

iMovie HD lets you create much longer scrolling block titles than the last version allowed: they can contain well over 4,000 characters. The trouble is, as you add text to a long title, iMovie doesn't update the maximum title duration displayed next to the Speed slider. The slider limits you to the maximum duration for a short title, which is about 20 seconds. So when you apply the settings, the long text scrolls fast—much too fast to read, which is a definite downside.

Here's the trick: after typing your long text in the title, click again on the Scrolling Block style name in the title list. Voilà! Now the Speed slider gives you the option of setting a much longer duration. Set the Speed slider to the duration you want, and then redo the title.

Ken Burns Accelerates Too Quickly

When the Ken Burns effect zooms in on an image, it sometimes accelerates out of control. After a short pause, the effect zooms faster and faster, all the way to the end of the clip. You can't get rid of this acceleration, but you can minimize it. These solutions rely on eliminating the pause at the start of the clip, which makes the zooming look smoother:

Zoom Less A gentle zoom is usually better anyway.



A Case of the Jaggies Before I added the title, the roof in this video footage consisted of nice straight lines. But with the introduction of the title, the roof became a jagged mess.

Add a Transition Add a Cross Dissolve transition before the Ken Burns clip; the transition covers the pause at the beginning. (The length of the pause depends on the duration of the clip and the amount of zoom.)

Crop the Clip Set the Ken Burns duration a second or two longer than you actually need. Then, after the clip is finished rendering, crop out the first part of the clip by dragging its left edge to the right.

Direct Trimming Doesn't Work

One of iMovie's most delicious features is direct trimming, which allows you to drag the right or left end of a clip to change its length. If this feature stops working—that is, the cursor never changes to offer direct trimming—that means you have Show Clip Volume Levels turned on in the View menu. You can't drag edges when your audio clips display the little horizontal volume lines.

Effects Change a Clip's Color

How's this for weird? You apply an effect to one clip, and its background suddenly changes color to match the hue of the last title you created. The workaround is to delete the effect (select the clip and press the delete key), save the project, close the project, and then reopen it. Now the effect should work correctly.

Export to HomePage Doesn't Have Fast Start

Fast Start is the QuickTime feature that makes it possible for your movie to start playing in your audience's Web browsers before the download is complete. Unfortunately, Fast Start doesn't work when you export an iMovie HD movie to HomePage.

For now, the solution is Francis Gorge's shareware program Lillipot 1.2 (macworld.com/0686). It lets you add Fast Start to your movie before you upload it to HomePage. □

Contributing Editor DAVID POGUE is a computer columnist for the *New York Times* and the author of *Mac OS X: The Missing Manual, Tiger Edition* (O'Reilly, 2005).

Ad Hoc Networking

When you're on the road, your portable Mac is often on its own, cut adrift from the networks it usually relies on for Internet access and file sharing. And while you can often get Net access, one way or another, there are times when you need to share that access, or share files, with your traveling companions. The solution is ad hoc (or computer-to-computer) networking.

An ad hoc network (*ad hoc* means "for this purpose") is a network you create on-the-fly, using direct Ethernet, FireWire, Wi-Fi, or even Bluetooth connections among your Macs. An ad hoc, computer-to-computer network doesn't rely on a local server, a router, or the Internet to mediate those connections. Instead, OS X (10.1 to 10.4) works out the details all by itself.

An ad hoc network does, of course, have its limits. If you're using the network to share Internet access, the number of people who can effectively join it will be limited by the amount of available bandwidth. And each connection method has its own limits—for instance, while a FireWire network can handle more than 200 people, a Wi-Fi network might support only ten.



Automatic Network To create an ad hoc wireless connection, you fill out the dialog box that appears when you select Create Network from the AirPort menu.

Pick Your Medium

How you connect your ad hoc network depends on the hardware you have and the speed you need.

FireWire You can create a FireWire network by daisy-chaining laptops (or desktops) together, but you need the right kind of cables. FireWire 400 (400 Mbps) is Apple's original flavor; the faster FireWire 800 (800 Mbps) was added to professional Mac models in early 2003. Current 15- and 17-inch PowerBooks include one port of each type. For the fastest speed between two PowerBooks, use a FireWire 800 cable to connect them; to daisy-chain multiple PowerBooks, you can use cables that have a FireWire 400 plug on one end and a FireWire 800 plug on the other.

If your network includes iBooks, current 12-inch PowerBooks, or older PowerBooks that each have a single FireWire port, you'll need a FireWire hub, too. But even with two iBooks, you can create a two-node network using the one port.

As far as Panther and Tiger are concerned, FireWire is just another network connection. Jaguar users used to be able to download a patch that enabled FireWire networking, but Apple has since pulled that download from its developer site.

Ethernet Creating an ad hoc Ethernet network is a snap. But because Macs include just one Ethernet port, you'll need an Ethernet hub or switch to connect more than two Macs.

continues

Impromptu Internet

Hooking up your ad hoc network to the Internet turns it into a standard LAN (local area network). Because you can use only one Ethernet or Wi-Fi interface at a time, if you're connecting to the Net via Ethernet, you'll have to share access with your ad hoc network via Wi-Fi (and vice versa). (Adding a second Ethernet port via a PC Card will work, but OS X can't seem to handle a second Wi-Fi adapter.)

To connect to the Internet via Ethernet or Wi-Fi, follow these steps:

1. Open System Preferences, select the Sharing icon, and click on the Internet tab.
2. Choose your Internet-connection method from the Share Your Connection Using pop-up menu.
3. In Panther, you then have to select just one other network over which you'll share your connection. In Tiger, you can choose one or more interfaces.
4. Click on Start, and you're ready to go.

This method provides assigned but private addresses to computers on your ad hoc network—these computers can send data but can't be discovered from the rest of the Internet—so it creates a passive but effective firewall.

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Get the Address OS X automatically assigns your Mac an address that doesn't conflict with other machines on the network.

With an autosensing Ethernet switch or a newer Mac with autosensing capabilities, you can use any kind of Ethernet cable for computer-to-computer or computer-to-switch connections. Older Macs require a crossover cable, and an older Mac used with an older switch requires a straight-through Ethernet cable. (To find out whether your Mac has autosensing Ethernet, see macworld.com/0701.)

Wi-Fi For a wireless ad hoc network, each participant obviously needs an installed Wi-Fi card, but it doesn't matter which specific Wi-Fi protocol each one uses. If everyone has AirPort Extreme (802.11g), the ad hoc network will run much faster than if even one person is using an older AirPort (802.11b) card.

Bluetooth While Bluetooth is also a reasonable option, its low speed and limited connectivity make it a last resort (see "The Trouble with Bluetooth").

Overall, I recommend FireWire for its speed and flexibility, but because it requires cables, you'll need to plan in advance. Wi-Fi is a natural second choice because it doesn't require cables.

Setting Up FireWire or Ethernet

To Panther and Tiger, Ethernet and FireWire are almost the same thing; it's easy to set up either.

1. Open System Preferences and click on the Network icon.
2. Choose New Location from the Location pop-up menu.
3. Name the new location Ad Hoc (for reference) and click on OK.
4. Click on Apply Now. (This will disable any active network connection you have.)

OS X will create a new location with an entry for each networking interface installed on your machine. If you view the items listed in the Show pop-up menu, you should see AirPort (if you have an AirPort card), Built-in Ethernet, and Built-in FireWire. The default configurations for each should work.

For FireWire, you now daisy-chain your computers, using FireWire cables. For Ethernet, you now connect two computers with a cable, or connect several computers with one or more Ethernet hubs or switches.

Setting Up Wi-Fi

Creating an ad hoc wireless network is different from using FireWire or Ethernet but just as easy (see "Automatic Network").

1. Click on the AirPort icon in your menu bar. From the AirPort menu, select Create Network.
2. Click on Show Options and encrypt the connection by entering a password as described in the dialog box.
3. Click on OK. The AirPort icon in the system menu bar changes to a little computer in a gray signal field.
4. Each user on your ad hoc network can now select the network that appears in his or her AirPort menu and enter the password you set.

Making the Network Work

Once all the computers are connected via cable or Wi-Fi, OS X will automatically assign addresses to each one; thanks to Apple's Bonjour technology (called Rendezvous before Tiger), each address will be unique (see "Get the Address"). (Windows XP can also assign addresses; if you install Bonjour for Windows on a PC, you can use it to take full advantage of the ad hoc network, accessing servers, printers, and file servers.)

In System Preferences, click on the Sharing icon and then on the Services tab. Turn on Personal File Sharing (AppleShare), Windows Sharing (Samba), or FTP Access, depending on which service you want to use. The Network icon in any Finder window lets you browse Bonjour-discoverable servers.

Ad hoc networking isn't right for every situation. But it's a great tool for gamers, business travelers, and people who need to pass big files or share an Internet connection when a local network isn't available. □

GLENN FLEISHMAN is the author of the *Take Control of Sharing Files in Tiger* e-book (TidBits Electronic Publishing, 2005).

The Trouble with Bluetooth



Bluetooth adapters are a standard feature in PowerBooks and an option for iBooks. The more widely available version of Bluetooth pushes 1 Mbps of data across a short-range network; the newer Bluetooth 2.0+EDR runs at 3 Mbps. Bluetooth has some advantages in moving files around, but its speed might limit its utility.

Because Bluetooth requires special software, you cannot mix Bluetooth with one of the other connection methods discussed in this article.

To connect machines over Bluetooth, you first must pair them. The pairing process securely makes sure that both computers want to talk to each other. Once that's accomplished, the two machines use Bluetooth File Exchange (Applications: Utilities) to transfer files.

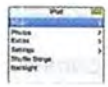
Unlike with the other aforementioned ad hoc networks, only two computers can exchange data at a time; however, you can set up pair relationships between multiple computers.

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Whip Up a Widget

Sure, you can download a widget that finds the nearest Pizza Hut or that flips a virtual coin. But what if you simply want to keep track of the days until your next vacation, or make sure that your spouse remembers to plan your surprise birthday party? You don't have to settle for downloaded widgets when it's so easy to make your own.

I'll show you how to build a widget that counts down to an event that's as far as a year away. Because the widget does all this with a single image and some HTML, JavaScript, and CSS, you can easily modify it to display whatever you want. You can download everything you need for the job at macworld.com/0689.

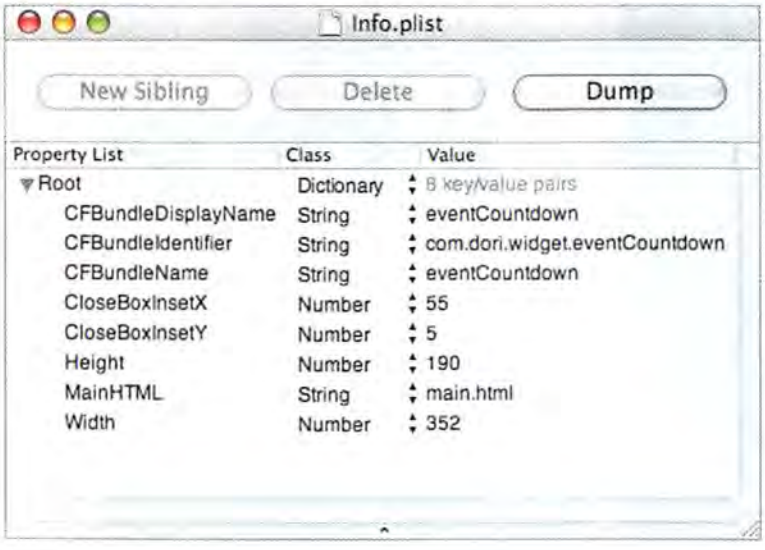
Widget Deconstructed

At its simplest, a widget consists of four things: a PNG image named Default.png, a preference file named Info.plist, an HTML file, and a folder (which holds the other pieces) with a name ending in *.wdgt*.

The PNG Image Widget graphics must be PNG (Portable Network Graphics) files. In particular, a widget needs a background image named Default.png. I chose a picture of a white cake because it's appropriate for so many occasions—from birthdays, anniversaries, and weddings to a baby's due date.

The Preference File If you've never written a Mac application before, the Info.plist file is probably new to you. It's really just a text file containing preference information that the widget needs in order to work correctly. For example, this file tells the widget how large it should be and where to put the close box (the *X* within a circle). If you've installed the Xcode Developer Tools that come on the Tiger installation DVD, you can launch the Property List Editor utility (/Developer/Applications/Utilities) and create a file from scratch that contains the required properties and values (see "Your Preferred Preferences"). For this example, simply download the countdown widget's Info.plist file from Macworld.com and modify the appropriate fields using the Property List Editor utility or a plain-text editor such as Bare Bones Software's free TextWrangler (www.barebones.com).

Your Preferred Preferences A preference file called Info.plist stores all the basic information that a widget needs to know about itself—from its dimensions to the location of its close box.



The HTML File There isn't enough room here to print the entire text of the widget's main.html file. Instead, download it from Macworld.com and open it with a text editor. If you've ever worked on a Web page before, you won't find much that's surprising. Actually, you can open this HTML file in a Web browser and it will display just fine—that's a handy way to debug any changes before turning the whole thing into a widget.

About two-thirds of the file is JavaScript, with a smidgen of CSS and HTML making up the remainder. Even if you don't know the first thing about JavaScript or HTML, it's not hard to modify the following critical part:

```
var theMonth = 8;
var theDay = 7;
var thePerson = "Dori";
var theEvent = "birthday";
```

This code says that my birthday (what the widget counts down to by default) is on the seventh day of the eighth month—that is, it's on August 7. Just change these four fields, and your widget will display a new event. For instance, to count down to my niece's upcoming marriage, I'd change the fields to read as follows:

```
var theMonth = 5;
var theDay = 6;
var thePerson = "Kate and Aaron";
var theEvent = "wedding";
```

The widget would then display a countdown to their nuptials on May 6 (for example, "165 days until Kate and Aaron's wedding"). After their wedding, I can change one line:

```
var theEvent = "anniversary";
```

The widget will forever afterward remind me of their anniversary each year.

The Folder Believe it or not, all you need to do to create a widget is move the three files mentioned earlier into a folder, and then give that folder a name ending with *.wdgt* (for example, My Vacation.wdgt). You'll get an alert asking whether you really want to use that extension; click on Add to verify that you do. (Those letters on the end tell OS X that the folder is a package.) The folder icon then turns into a widget. When you double-click on it, the OS will launch it instead of opening the folder.

Move that widget into */your user folder/*Library/Widgets. You'll see this folder if you've ever auto-installed a widget; if it doesn't exist, just create it. The next time you trigger the Dashboard layer (by pressing F12) and click on the plus sign (+) at the bottom of the screen (or press ⌘-=) to reveal the Widget Bar, your new widget should appear, listed in alphabetical order (based on folder name). If you can't see it, you might have to scroll past where it should be and then back again to reveal it. Click on the widget, and it will ripple and then appear in the center of your screen (see "A New Type of Nagware").

Eradicate Errors If, when you view your widget, you find that you made an error and need to get into the files again, control-click on the widget folder in the Finder and choose Show Package Contents from the contextual menu. Edit the files and reload the widget, and you should see your changes. Reload a widget by clicking on it in the Dashboard layer (to make it the frontmost widget) and pressing ⌘-R. You'll see it swirl, and then the new version will appear.

Advanced Geekery

Everything we've discussed so far should be well within the abilities of anyone who has ever edited a text file, created a folder, and renamed a file. Here are some possibilities for people who want to take this a step further.

Change Your Image If the image of the plain white cake doesn't fit your event, you can replace it with any PNG file you want. Just give it the name Default.png, and your image will display instead of mine.

To make it look perfect, though, first pick an image that's not too large (the average widget is no more than 300 pixels high by 350 wide, and most are smaller) and that has enough empty space to hold your message. Next, go into the Info.plist file and change the `Height` and `Width` values (in pixels) to match those of your new image. (Click on the image icon in the Finder and press ⌘-I. You'll find the image dimensions under More Info.) You may also need to change the `CloseBoxInsetX` and `CloseBoxInsetY` values; those are, respectively, the *x* and *y* coordinates for where you want the close box to display.

Change Your Style Maybe fuchsia and cursive just aren't your style, or perhaps you have a lot to say and only a small space in which to say it. Look in the HTML file for the style section, and modify the rules in the `theText` section:

```
font: 40px/56px "Apple Chancery", cursive;
color: fuchsia
```

CSS (Cascading Style Sheets) standards determine the colors and styles you can choose from. Basically, you can style the text using any fonts on your computer, but you should always assign a backup of serif, sans serif, monospace, cursive, or fantasy in case that font isn't available. Pick a color from options including black, white, aqua, blue, fuchsia, gray, green, lime, maroon, navy, olive, purple, red, silver, teal, and yellow. (If you're feeling sassy, you can use any CSS RGB hexadecimal value, from 000000 to FFFFFF.)

One of the best things about widgets is that you can reliably depend on people having the many gorgeous fonts that Apple includes with Tiger—from AmericanTypewriter to Zapfino. If you want to pass your widget on to others, make sure to use an Apple font (check macworld.com/0690 to see a list).

Double Your Pleasure Want to have multiple countdowns, each for a different date? Duplicate your widget and give the new version a different name (still ending with *.wdgt*, though). Open the new widget's HTML file and change the dates and names (as you did earlier) to reflect the alternative event. Now open the new Info.plist file and look for each property that starts with `CFBundle`. If you want more than one countdown widget based on this example, you need to change these to unique values. For example, you might change `eventCountdown` to `anniversaryCountdown`.

Go back into the Dashboard layer and check out the Widget Bar; you should see both versions now.

What's Next?

Now that you've created your first widget, you can send it to your friends or upload it to Apple's widget submission page at macworld.com/0691 for other people to check out. Even better, send your countdown widgets (based on this example) to geekfactor@macworld.com. We'll post our favorites on Macworld.com.

DORI SMITH is the author of the upcoming *Dashboard Widgets for Mac OS X Tiger: Visual QuickStart Guide* (Peachpit Press).



A New Type of Nagware Put one of these on your spouse's Mac, and he or she will never again forget your birthday or anniversary.

PHOTOGRAPH BY PETER BELANGER

Mac 911

Solutions to Your Most Vexing Mac Problems

Crossed Signals

To boost my wireless network's signal strength, I have an Apple AirPort Extreme Base Station on the second floor of my town house and an AirPort Express on the first floor. Aside from the neighbors' occasional 2.4GHz phone call, everything has worked fine. Lately, however, several 802.11 networks have popped up in my vicinity, and one of them has a signal strong enough to prevent me from connecting to my network when I'm on the first floor. How can I improve the signal strength?

Chris Tatian

Instead of attempting to boost the strength of the signal, try avoiding interference from your neighbors' wireless networks. How? Change channels.

To change the channel that your AirPort uses, launch AirPort Admin Utility (in the /Applications/Utilities folder). Select your base station in the resulting window and click on Configure. If asked to, enter the password. Click on the AirPort tab, choose a new channel from the Channel pop-up menu, and then click on Update.

Ideally, the channel you choose should be at least four or five channels away from that of the adjacent wireless network or phone—for example, if a nearby network is broadcasting on channel 1, you'll choose channel 6 for your network. To learn which channels nearby networks are using, download Spintriplet's free Air Traffic Control widget (macworld.com/0666) if you're running Tiger; give the free MacStumbler (www.macstumbler.com) a go if you're using an earlier version of OS X. Each of these utilities lists local wireless networks along with their channel information (see "Channel Surfing").

Avoiding interference from the phone will be trickier. At one time, 2.4GHz phones used just one channel—usually 11. Newer phones use something called *frequency hopping technology* that allows them to leap from channel to channel, looking for the strongest one. If the phone lands on the channel you've assigned to your base station, you could get interference even after switching channels.



Channel Surfing
Wireless interference bringing you down? The Air Traffic Control widget can help you avoid crowded wireless channels. Use it to find out what channel other networks are on (circled) so you can avoid them.

Typing Toddler

I love using iChat AV to video-chat with my distant family. However, when my 16-month-old is "talking" to Grandma and Grandpa, he pounds on all the keys on my iBook. I'd love to find a way to disable the keyboard temporarily while chatting. Since this is a laptop, I can't just unplug the keyboard's cable.

Eric Greene

A common technique in jiujitsu is to use your opponent's strength against him. That's a sage practice in this case, too. If he's a typical 16-month-old, your son undoubtedly has the patience of a tsetse fly and quickly bangs out a staccato series of tattoos on the keyboard before moving on to variations on the same theme. To prevent his playing from having an effect, you needn't disable the keyboard—just slow down its responsiveness.

To do so, open the Universal Access preference pane, click on the Keyboard tab, enable the Slow Keys option (at the bottom of the window), and drag the Acceptance Delay slider all the way to the left (toward the Long setting). With your Mac configured this way, the user must hold down a key for a full second—which in toddler terms is an eternity—before your Mac registers it.

A Matter of Some Import

When I launch Mail 2.0 in Tiger, it starts importing old messages from Mail 1.0. Apparently, there's an old sent-mail message that Mail 2.0 doesn't like: the application hangs on one message and stops importing sent mail. When I cancel, the whole thing stops. I've tried launching Mail again, but the whole process repeats. Where does that old message live? I'd like to delete it before I launch Mail 2.0, and skip the import step altogether.

Jeff Hounshell

You'll find all of Mail's mailbox files (called *mbox* files) by following this path: */your user folder*/Library/Mail/*name of account*, where *name of account* is the name of your e-mail account—POPtesting@mail

.example.com, for example. Inside this folder is a Sent Messages.mbox folder. Give this folder the bum's rush (in other words, delete it); that should fix the problem.

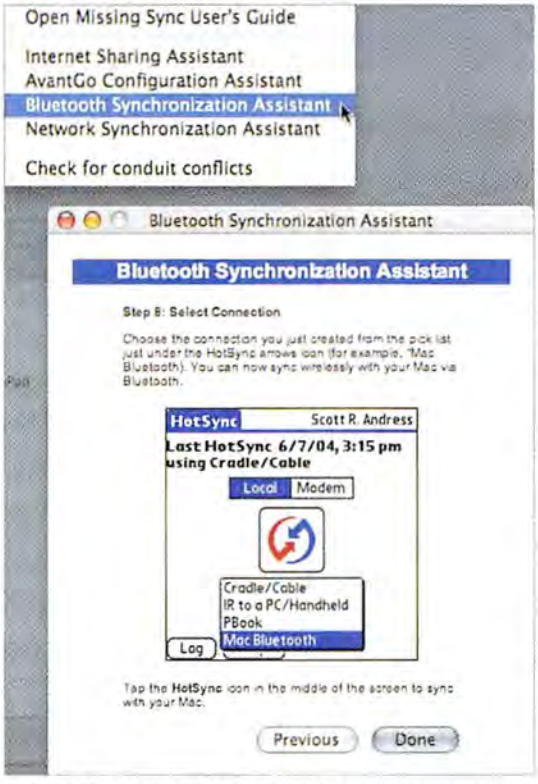
You can also choose to import *some* of your old mail by choosing File: Import Mailboxes. In the Import dialog box that appears, select the Mail For Mac OS X option, click on Continue, and select the account folder from which you want to import messages. In the next window, choose the mailboxes you want to import and click on Continue. This will place your old mail in an Import folder in Mail's sidebar. Alternatively, you can enable the Other option in the Import window and selectively import individual mbox files.

Internet for All

Is it possible to share the DSL broadband connection I use for my iBook with my Bluetooth-equipped Palm?

Christopher Mahoney

It is. Bruce McKenzie offers instructions for sharing just such an Internet connection over Bluetooth on bioneural.blog (macworld.com/0663). His instructions require some work in Terminal, as well as a fair amount of mucking about in the Mac's and the Palm's preferences, but after some trial and error, you might make the connection.



Getting the Blues The Missing Sync's Bluetooth Synchronization Assistant is the easiest way to share your Mac's Internet connection with a Palm device.

ICON BY PAUL HOWATT; MUG PHOTOGRAPH BY PETER BELANGER

TIP OF THE MONTH

Lost for Words

Say you're typing in the Tiger version of a text-centric Apple application such as TextEdit, Mail, iChat, or Stickies, and you can't conjure up the complete word you're looking for. Just type the first couple of letters in the word and press the escape key. A list of words that begin with the letters you've typed appears. Select the one you want, and it replaces the letters you've typed.

Scott Mahrer

You can tell from my lukewarm recommendation that I have a better scheme in mind. That scheme is Mark/Space's The Missing Sync for Palm OS ($50; download, $40; macworld.com/0664). As evidenced by it's ▮▮▮▮▯ mouse rating (see macworld.com/0665), *Macworld* has found it to be a very capable tool for synchronizing your Palm device with Apple's iCal and Address Book and Microsoft Entourage (and unlike Palm's HotSync Manager, The Missing Sync works with Tiger). In addition to offering syncing capabilities, The Missing Sync makes it a snap to share an Internet connection between Bluetooth-equipped Macs and Palm devices.

After enabling Bluetooth on both devices, select The Missing Sync's Internet Sharing Assistant (Help: Internet Sharing Assistant). Walk through Sharing Assistant's instructions, and you'll be browsing the Web with your Palm in no time (see "Getting the Blues").

Bookmark Management

Is there any way to alphabetize my bookmark collection in Safari?

Christian Gilbert

You could do it by hand, of course, but what a bother—particularly if you routinely add new bookmarks. If you're using Tiger, you can alphabetize your Safari bookmarks with Sheep Systems' Bookdog (macworld.com/0669)—priced at an introductory $10 as I write this, but it'll be $15 when version 2.0 ships. It can organize not only individual bookmarks, but also the folders containing those bookmarks. You can also use Bookdog to track down and delete duplicate bookmarks.

Use the company's free SafariSorter (macworld.com/0670) if you're running OS X 10.2 to 10.3.8 (it's not compatible with 10.3.9).

Crippled QuickTime

In QuickTime Player 6, the video controls let me lighten, darken, change the contrast of, and tint videos. I upgraded to QuickTime 7, and that feature seems to no longer be there—the A/V Controls cover only audio and playback speed. Is there any way to access the video controls in the new version?

Rich Root

QuickTime Player 7's A/V Controls allow you to edit video only on Macs with video cards that support

continues



Send your tips to mac911@macworld.com. If we publish yours, you'll receive this dandy mug. All published submissions become the sole property of *Macworld*.

TOOLS OF THE TRADE

The Lowdown on Laptops

There's a reason—other than the pure awkwardness of it—that Apple didn't christen its laptops the Apple Macintosh PowerBook and the Apple Macintosh iBook. Laptops are different beasts from desktop computers. They deserve a special name, as well as special resources for their care and feeding.

> **Peruse Peripherals** The Apple Store (store.apple.com) is a perfectly fine place to browse iBook and PowerBook peripherals, but suppose you want a third-party high-capacity battery for your iBook or a wireless PC Card for your PowerBook? The Store doesn't stock such non-Apple items. Instead, turn to Froogle, Google's product finder (froogle.google.com). Froogle allows you to be very specific in your searches. If you type `PowerBook G4 15" high capacity battery`, for example, you'll get dozens of hits (including sales on eBay).

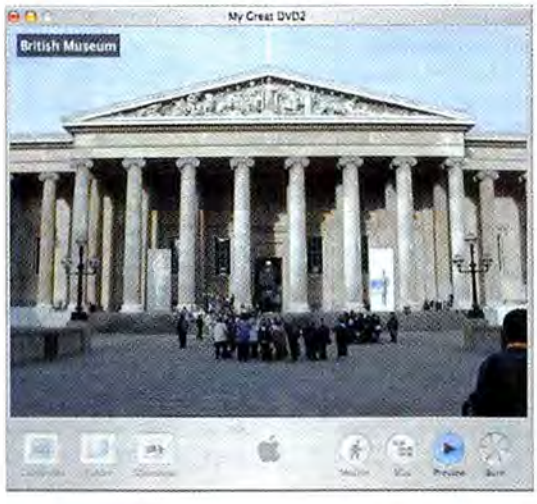
> **Dig for Deals** If you're looking for deals on new and reconditioned Apple laptops and peripherals, check out PowerBook Central (www.powerbookcentral.com). The site routinely lists bargains on the laptops you love.

> **Keep Up on Upgrades** Accelerate Your Mac (www.xlr8yourmac.com) is a terrific resource for learning how to upgrade any Mac, laptops included. If you're interested in replacing your iBook's or PowerBook's hard drive, media drive, or processor, this should be your first stop.

> **Find It on the Forums** This puts me at risk of accusations that I'm shilling for the home team, but it's unavoidable: Macworld.com's Portable Macs and Handhelds forum (macworld.com/0672) is a great place to pose your perplexing PowerBook and iBook questions and help others get out of similar jams.

Apple's Core Image technology—generally video cards made by ATI and not those from Nvidia. You'll know that your video card lacks support if you can't see the video adjustment sliders in the A/V Controls window—you'll be able to adjust only speed and audio settings. This is the case in both the free version of QuickTime and the $30 Pro version.

However, this limitation doesn't exist if you use QuickTime Player 6.5.2 with QuickTime 7. Hopefully, you still have a copy of this older version of Player. If you don't, download the QuickTime 6.5.2 Reinstaller (macworld.com/0671), and extract QuickTime Player with CharlesSoft's $20 Pacifist (www.charlessoft.com). This version of QuickTime Player, coupled with QuickTime 7.X, will offer a video option in A/V Controls even if your graphic card doesn't support Core Image.



Name in Frame If you enable the Show Titles option in iPhoto 5's slideshow settings, you can plaster titles of your pictures on your iDVD slide shows.

Dodgy Discs

I routinely receive large files on CDs that were created on a Windows PC, and those discs fail to mount on my Mac. What instructions can I give those Windows users so that the discs they send me will mount on my Mac?

Gregory Payne

Politely ask your PC pals to stop using Roxio's DirectCD or Drag-to-Disc utilities to burn their discs. These programs support *packet writing*, which allows you to burn files to a CD-R or CD-RW multiple times using a file format called UDF (Universal Disc Format). This format is a convenient way to append files to a disc designed as write-once, but discs produced using it aren't Mac-compatible. Discs made by other means on the PC will almost certainly be burned in the ISO 9660 format, which the Mac understands completely.

If the disc format doesn't appear to be the problem, check the kind of media people are sending you. The Mac loves CD-R media but can act finicky with CD-RW discs.

Slugging Slide Shows

Is there a way to put the file name of each picture somewhere on screen during a slide show created in iMovie, iDVD, or iPhoto? This would be helpful for viewers who want to extract a few favorite photos from the DVD.

Doug Fehr

While you can configure Apple's iPhoto 4 so that it displays the file name of each picture during its slide shows, it won't export that slide show to iDVD with the file name in place. If you want the name to appear in iDVD (or in a QuickTime movie you export to iDVD), you must use iPhoto 5 (part of the iLife '05 suite, $79; www.apple.com). Here's how:

Assemble a slide show in iPhoto 5 (File: New Slideshow) and click on the Settings button at the bottom of the iPhoto window. In the resulting sheet, enable the Show Titles option and click on OK. Choose Share: Send To iDVD. This creates an MPEG-4 QuickTime movie file that's stored in the Movies folder within your user folder. You'll see the title of each picture in a small box in the movie frame's upper left corner (see "Name in Frame").

iDVD will open with the slide show in place. If you like, burn it onto a DVD. Otherwise, open your Movies folder, locate the QuickTime movie that iPhoto created for iDVD, and do with it what you will.

Contributing Editor CHRISTOPHER BREEN is the editor in chief of Playlistmag.com and the author of *Secrets of the iPod and iTunes*, fifth edition (Peachpit Press, 2005).

ICON BY PAUL HOWAIT

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Interact with the companies whose products and services are advertised in Macworld.

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CDW	800-ALL-MACS	15
Chronos	sohoseries.com	8
DLO/Netalog	dlodirect.com	49
Dymo	dymo.com	23
Fujitsu	fcpa.fujitsu.com/9689	6
Geek Cruise	geekcruises.com	40, 46
Griffin Technology	griffintechnology.com	37
Insider Software	insidersoftware.com	50
Iomega	iomegadirect.com	25
iSkin	iskin.com	83
Kerio Technology	kerio.com	14
Klipsch	klipsch.com	21
La Cie	lacie.com	C4
Macally	macally.com	79
MacConnection	macconnection.com/mw	102-103
MacMall	800-321-7532	54-55
Macworld Conference & Expo	macworldexpo.com	38
Maxtor	maxtor.com	70
Micromat	800-829-6227	19
Miraizon	miraizon.com/mw10	39
Omni Group	omnigroup.com/macworld10	33
Other World Computing	macsales.com	81, 89, 98-101
Outspring	outspring.com	10
Portable Media Expo	portablemediaexpo.com	46
Sanyo Corp.	sanyodigital.com	11
SDI Technology	ihomeaudio.com	91
Seiko Instruments	siibusinessproducts.com	29
Seybold	seybold365.com/newyork	48
Small Dog	smalldog.com	47
Sonnet	sonnettech.com/solutions	13
Xerox	xerox.com/office/1965	77
zCover	zcover.com	2-3

PAGE NO.	ADVERTISER	GET-INFO
HARDWARE		
COMPUTERS		
C2-1	Apple Computer	apple.com
FURNITURE		
9	Anthro	anthro.com/mac
HARD DISK STORAGE		
49	DLO/Netalog	dlodirect.com
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MISCELLANEOUS		
37	Griffin Technology	griffintechnology.com
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79	Macally	macally.com
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91	SDI Technology	ihomeaudio.com
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13	Sonnet	sonnettech.com/solutions
2-3	zCover	zcover.com
PRINTERS		
31	Brother	brother.com
23	Dymo	dymo.com
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SOFTWARE		
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C3	4D	4d.com
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ENTERTAINMENT		
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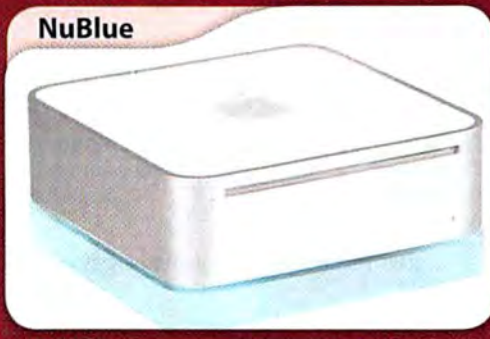
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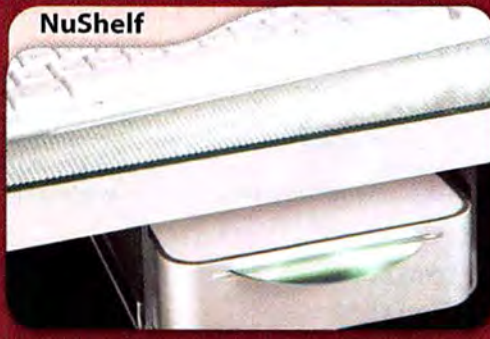


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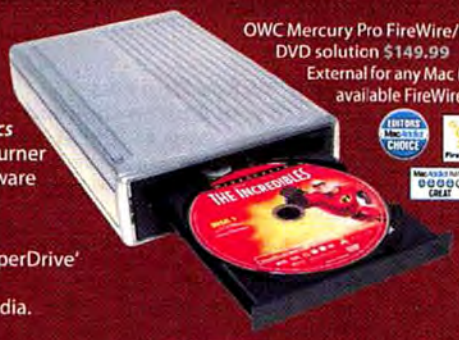
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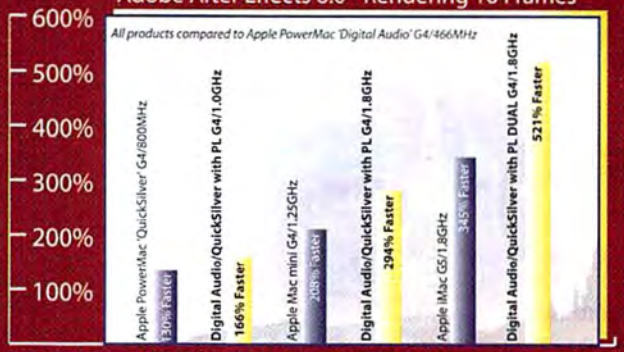
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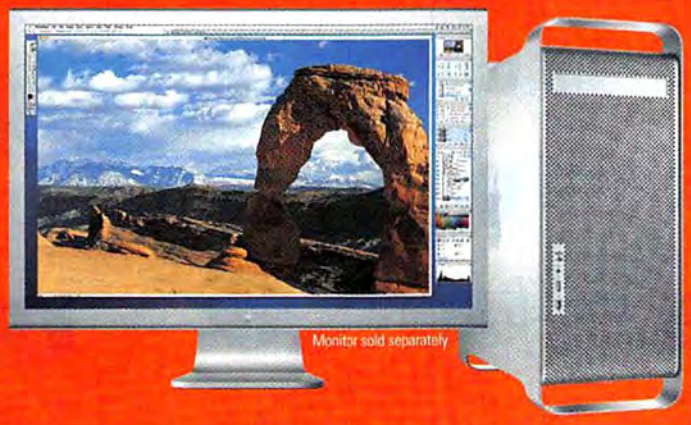
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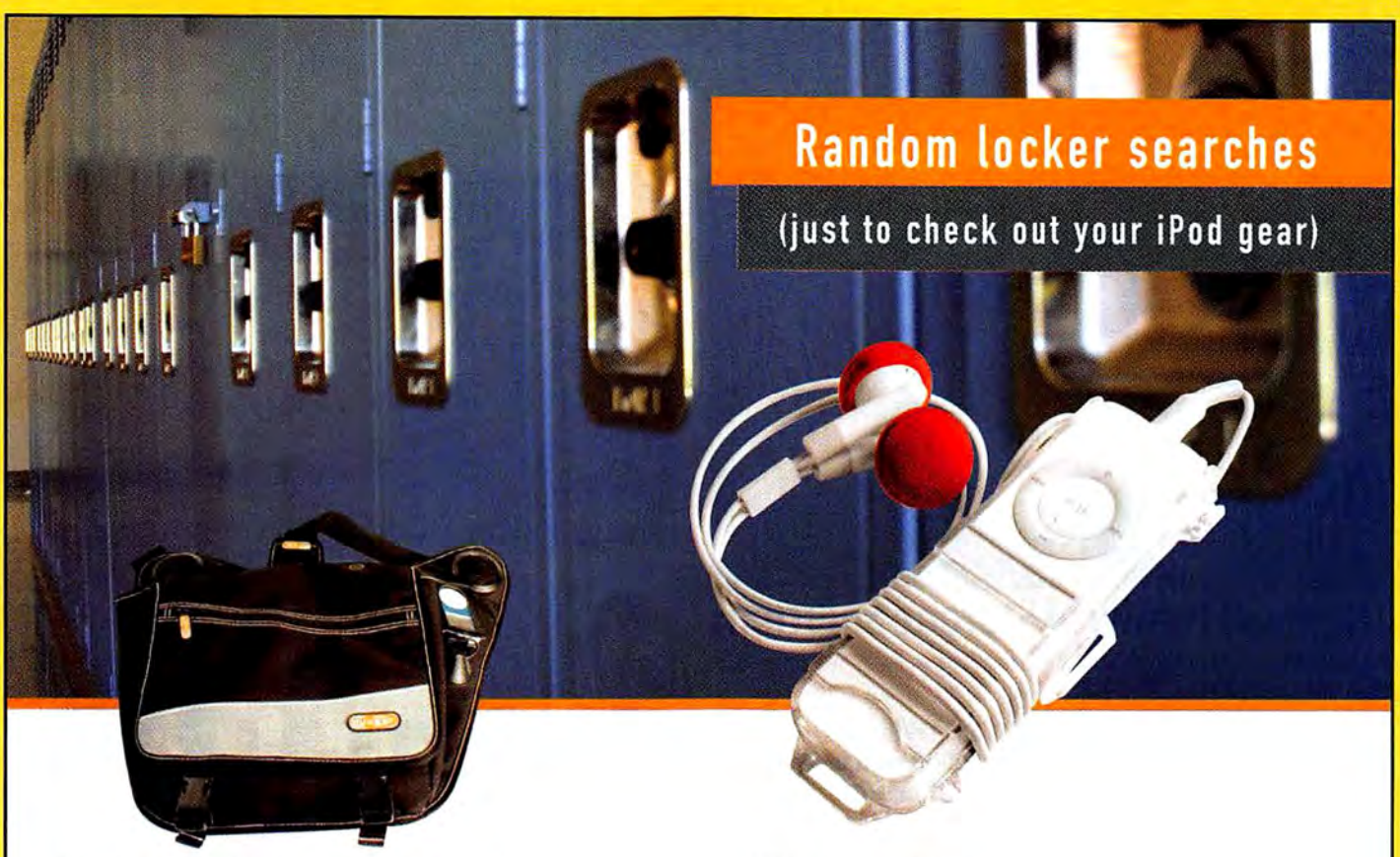
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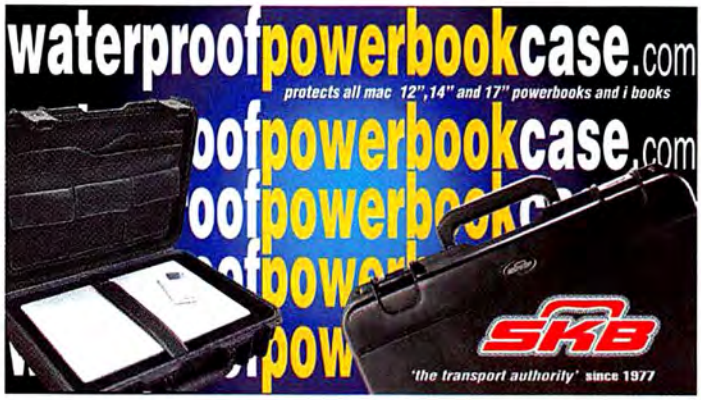


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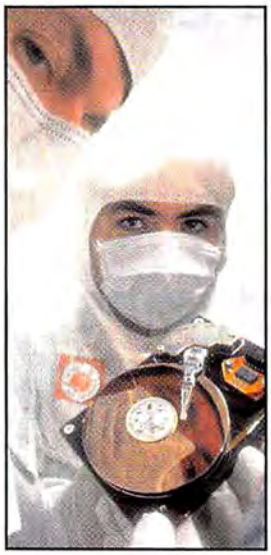
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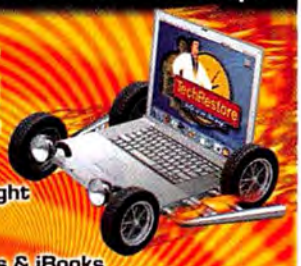
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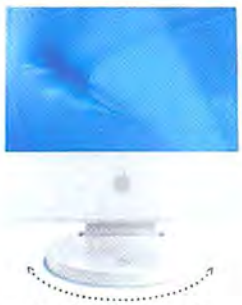


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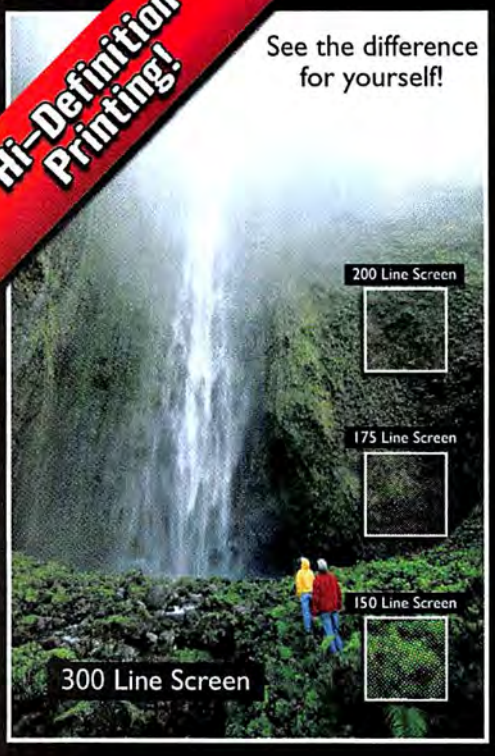
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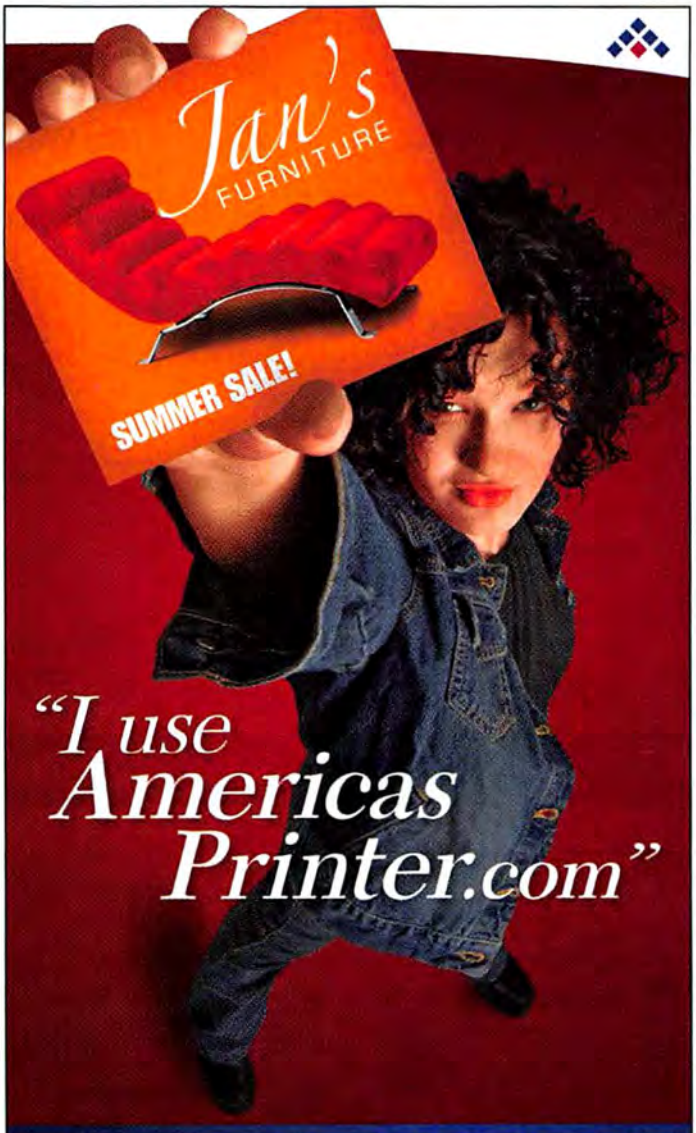


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FROM THE EDITORS OF MACWORLD



POWER GAME FACTORY

In case just *playing* games isn't enough for you, Sawblade Software's $44 Power Game Factory lets you make your own side-scrolling 2-D action game—no programming required. Power Game Factory emphasizes your artistic skills, rather than your coding know-how. You supply the backgrounds, character art, weapons, explosions, and other graphics, tell Power Game Factory what does what, and then click on the Build button—out comes a finished, royalty-free game that you can sell or just give away (www.sawbladesoftware.com).—PETER COHEN

Photoshop Automator Actions

When I made the move to Tiger, I was ready to start simplifying my daily life with Automator workflows. Then I discovered that Automator couldn't speak to many of the apps I use most often—including Adobe Photoshop. Luckily, Ben Long—the author of *Complete Digital Photography,* third edition (Charles River Media, 2004), and a frequent *Macworld* contributor—has taken up the call. He's created a set of more than 30 free Automator actions, including Gaussian Blur, Auto Levels, Filter from EXIF, and Save as JPEG, for Photoshop CS and CS2. Although they're not the only third-party Photoshop actions out there, they make up the most complete set of free actions I've seen (macworld.com/0702).—KELLY LUNSFORD

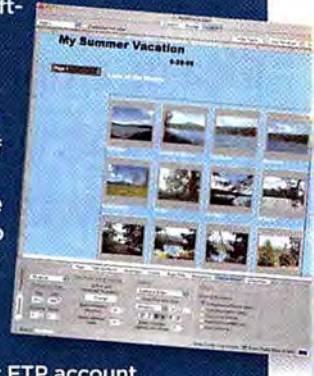


Quicksilver

Sure, you *can* use Spotlight to find and launch apps, but it's really better suited to finding files. For launching apps, Blacktree's free Quicksilver is my tool of choice—and the latest version (a beta release at press time) can run Automator workflows, look up saved searches in Finder, and run Spotlight queries inline. But those aren't the only things it can do. You can use it to append text to files, copy text to the Clipboard, and much more. And when my fingers accidentally hit a random sequence of keys, Quicksilver often responds in a new, unexpected way (quicksilver.blacktree.com).—DAN MILLER

SHUTTERBUG

I've got too many digital photos and not enough time to organize and post them online—so I was intrigued by the concept behind XtraLean Software's $34 ShutterBug 1.2. The app can whip up any batch of photos into an attractive online photo album that's ready for you to upload to your .Mac or FTP account. And you don't have to be a design virtuoso to use it—ShutterBug comes with 45 templates that you can customize with backgrounds, colors, and type. The new version has horizontal and vertical page centering, diagonal repeating watermarks for photos, alphabetical sorting of photos upon import, and image alt tags. You provide the snaps; ShutterBug does the rest (www.xtralean.com).—JACKIE DOVE



WHAT'S HOT

Brought to you by John Moltz of the Crazy Apple Rumors Site (www.crazyapplerumors.com)

1. **Apple introduces the multibutton Mighty Mouse.** *Unfortunately, this was immediately followed by the introduction of the one-button Underdog keyboard.*
2. **Microsoft renames Longhorn—its next OS, scheduled for release in 2006—"Windows Vista."** *The name just barely beat out "Windows Tiger."*
3. **Apple passes half a billion songs sold on the iTunes Music Store.** *Paul McCartney and Yoko Ono, call your agents.*
4. **Apple announces a net profit growth of 425 percent.** *Wall Street analysts responded by sticking their fingers in their ears and yelling, "LA-LA-LA-LA-LA! I AM NOT LISTENING!"*



WMV PLAYER

My favorite baseball team and I are separated by 400 miles, so I enjoy watching streaming highlights on the Major League Baseball site (mlb.com). But I hate the fact that I have to use the awful Windows Media plug-in. Flip4Mac's WMV Player, which includes both a browser plug-in and a QuickTime codec, eases my pain. It lets me use QuickTime to watch any Windows Media 7, 8, or 9 video (in SD or HD format), whether it's streaming in a browser or playing locally. And $10 is a bargain price to pay for being able to banish Windows Media Player from my Mac (www.flip4mac.com).—JONATHAN SEFF

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